1 2 3 4 5 6 7	Richard N. Sox (<i>Pro Hac Vice</i>) W. Kirby Bissell (<i>Pro Hac Vice</i>) rsox@dealerlawyer.com kbissell@dealerlawyer.com BASS SOX MERCER 2822 Remington Green Circle Tallahassee, Florida 32312 Telephone: (850) 878-6404 Facsimile: (850) 942-4869 Lead Counsel for Direct Automotive Management, Inc.						
0	UNITED STATES DISTRICT COURT						
8		CT OF CALIFORNIA SCO DIVISION					
9	SANTRANCE	SCO DIVISION					
10	IN RE: VOLKSWAGEN "CLEAN DIESEL"						
11	MARKETING, SALES PRACTICES AND PRODUCTS LIABILITY LITIGATION	MDL 2672 CRB (JSC)					
12		SECOND AMENDED COMPLAINT					
13	This Documents Relates to:	SECOND AMENDED COMILIANT					
	Direct Auto Management, Inc. v. Volkswagen	The Honorable Charles R. Breyer					
14	Group of America, Inc. et al., No. C-18-0335						
15							
16							
17	SECOND AMENDED COMPLAINT	AND DEMAND FOR JURY TRIAL					
18	Plaintiff, DIRECT AUTOMOTIVE MAN	NAGEMENT, INC. (hereinafter "DAM"), hereby					
19	files this Second Amended Complaint and Demand for Jury Trial against Defendants, ROBERT						
20	BOSCH, LLC (hereinafter "Bosch LLC"), and ROBERT BOSCH GmbH (hereinafter "Bosch						
2122	GmbH"). DAM seeks to recover damages it suffered from a proposed new dealership which it was						
23	awarded prior to the revelations of fraud and other malfeasance surrounding the emissions of						
24	Volkswagen's TDI automobiles. In support thereof, DAM asserts as follows:						
25	<u>INTRODUCTION</u>						
26	On September 18, 2015, the most significant fraudulent event in the automotive industry in						
27	decades was revealed. The United States Environ	nmental Protection Agency ("EPA") charged that					
28							

Defendants had collectively engineered a massive scheme to fraudulently obtain environmental certifications for over half a million automobiles. Defendants working collaboratively installed and programmed "defeat devices" in "Clean" diesel automobiles marketed and distributed by VW Group to VW franchise motor vehicle dealers. The "defeat devices" enabled each vehicle to recognize when it was undergoing emissions testing versus operating under normal driving conditions. If the vehicle was undergoing emissions testing, the defeat device would curtail engine performance to reduce emissions, ensuring its compliance with both the EPA and the California Air Resources Board ("CARB") regulations regarding oxides of nitrogen ("NO_X") emissions. However, when the vehicle was in normal operation, it emitted up to forty (40) times the NO_X standard allowed under federal and state laws and regulations, including the Clean Air Act ("CAA").

As a result, over half a million vehicles sold by VW dealers are non-compliant with US environmental regulations and will either be bought back and removed from operation or require costly, performance-degrading fixes. Either way, the emissions scandal has degraded the public's trust and opinion of the Volkswagen brand, and by extension, its franchise dealers. This sentiment has greatly diminished the current and expected revenue for both prospective and existing franchise dealers. Those vehicles implicated are the following: 1) VW Jetta 2.0 Liter Diesel Models from 2009-2015; 2) Volkswagen Jetta SportWagen 2.0 Liter Diesel Models from 2009-2014; 2) Volkswagen Beetle 2.0 Liter Diesel Models from 2012-2015; 3) Volkswagen Beetle Convertible 2.0 Liter Diesel Models from 2012-2015; 4) Volkswagen Golf 2.0 Liter Diesel Models from 2010-2015; 5) Volkswagen Golf SportWagen 2.0 Liter Diesel Models in 2015; 6) Volkswagen Passat 2.0 Liter Diesel Models from 2012-2015; and 7) Volkswagen Touareg 3.0 Liter Diesel Models from 2009-2016 (collectively the "Affected Vehicles"). These vehicles are also generally known as "TDIs" which describes the "turbocharged direct injection" in those vehicles diesel engines.

When the massive fraud became public, DAM was two years into an ambitious project to open a new VW-brand dealership in Westerville, Ohio. Notably, the ability to open this dealership was the result of an earlier agreement between DAM and Volkswagen, long before the fraud was known to DAM. However, DAM continued to expend time, energy and money towards this goal based on Volkswagen's representations following the fraud's discovery that it would take care of dealers, both existing and prospective because of the damage it had caused. However, with the buyback of many of the Affected Vehicles, the earnings outlook for the new VW dealership has dimmed significantly. And, while VW Group and VWAG have settled with existing VW franchise dealers, those dealers in the process of opening new dealerships were unfairly excluded, again based on false representations by Volkswagen executives. Therefore, DAM must institute this action to seek compensation for its losses relating to the emissions scandal and fraud, which has become known as "Dieselgate."

PARTIES

- 1. Plaintiff, DAM, is a corporation organized and existing under the laws of the State of Florida, with its principal place of business at 3900 W. Kennedy Blvd., Tampa, Florida 33609.
- 2. DAM's principal, Jason Kuhn, is the owner-operator of multiple, new automobile dealerships in and around the greater Tampa-area.
 - 3. Mr. Kuhn holds his ownership of each of his automobile dealership entities in DAM.
- 4. From at least 2005 to 2015, Bosch GmbH, Bosch LLC and CEO Volkmar Denner (together, "Bosch") were knowing and active participants in the creation, development, marketing, and sale of illegal defeat devices specifically designed to evade U.S. emissions requirements in vehicles sold solely in the United States. Bosch GmbH participated in the development of the defeat device, and Bosch GmbH and Bosch LLC participated in the scheme to prevent U.S. regulators from uncovering the device's true functionality. Moreover, Bosch's participation was not limited to

17 18 19

16

21 22

23

20

24 25

26 27

Bosch GmbH's primary role in engineering the defeat device (in a collaboration with VW described
as unusually close). Bosch LLC marketed "Clean Diesel" and lobbied U.S. regulators to approve
the Affected Vehicles. These lobbying efforts, taken together with evidence of Bosch LLC's and
Bosch GmbH's actual knowledge that "akustikfunktion" operated as a defeat device, and
participation in concealing the true functionality of the device from U.S. regulators, can be
interpreted only one way under U.S. law: Bosch LLC and Bosch GmbH were both knowing and
active participants in a massive, decade-long conspiracy with VW to defraud U.S. consumers
regulators and existing and prospective franchise dealers.

- 5. Robert Bosch GmbH ("Bosch GmbH") is a German multinational engineering and electronics company headquartered in Gerlingen, Germany. Bosch GmbH is the parent company of Robert Bosch LLC. Bosch GmbH, directly and/or through its North-American subsidiary Robert Bosch LLC, at all material times, designed, manufactured, and supplied elements of the defeat device to Volkswagen for use in the Affected Vehicles. Bosch GmbH is subject to personal jurisdiction of this Court because it has availed itself of the laws of the United States through its management and control over Bosch LLC, and over the design, development, manufacture, distribution, testing, and sale of hundreds of thousands of the defeat devices installed in the Affected Vehicles sold or leased in the U.S.
- 6. Robert Bosch LLC ("Bosch LLC") is a Delaware limited liability company with its principal place of business located at 38000 Hills Tech Drive, Farmington Hills, Michigan 48331. Bosch LLC is a wholly-owned subsidiary of Robert Bosch GmbH. Bosch LLC directly and/or in conjunction with its parent Bosch GmbH, at all material times, designed, manufactured, and supplied elements of the defeat devices to Volkswagen for use in the Affected Vehicles.
- 7. Both Bosch GmbH and Bosch LLC (together with Volkmar Denner, "Bosch") operate under the umbrella of the Bosch Group, which encompasses some 340 subsidiaries and companies.

The Bosch Group is divided into four business sectors: Mobility Solutions (formerly Automotive Technology), Industrial Technology, Consumer Goods, and Energy and Building Technology. The Mobility Solutions sector, which supplies parts to the automotive industry, and its Diesel Systems division, which develops, manufactures, and applies diesel systems, are particularly at issue here and include the relevant individuals at both Bosch GmbH and Bosch LLC. Bosch's sectors and divisions are not grouped by location, but by subject matter. Mobility Solutions includes the individuals involved in the RICO enterprise and conspiracy at both Bosch GmbH and Bosch LLC. Some individuals worked at both Bosch GmbH and Bosch LLC during the course of the RICO conspiracy. The acts of the individuals described in this Complaint have been associated with Bosch GmbH and Bosch LLC whenever possible. Regardless of whether an individual works for Bosch LLC in the U.S. or Bosch GmbH in Germany, the individuals hold themselves out as working for "Bosch." Bosch documents and press releases often refer to the author as "Bosch" without identifying any particular Bosch entity. Thus, the role of each Bosch defendant herein can only be more accurately ascertained once discovery commences.

- 8. From at least 2005 to 2015, Bosch GmbH, Bosch LLC, and currently unnamed Bosch employees were knowing and active participants in the creation, development, marketing, and sale of illegal defeat devices specifically designed to evade U.S. emissions requirements in vehicles sold solely in the United States.
- 9. Notably, German authorities are now investigating Bosch GmbH and authorities are focusing on certain Bosch employees:

Three Bosch Managers Targeted as German Diesel Probe **Expands**

A German probe into whether Robert Bosch GmbH helped Volkswagen AG cheat on emissions tests intensified as Stuttgart prosecutors said they were focusing on three managers at the carparts maker.

22

23

24

25

26

While Stuttgart prosecutors didn't identify the employees, the step indicates that investigators may have found specific evidence in the probe. Previously, prosecutors have said they were looking into the role "unidentified" Bosch employees may have played in providing software that was used to cheat on emission tests.

"We have opened a probe against all three on suspicions they aided fraud in connection to possible manipulation in emissions treatments in VW cars," Jan Holzner, a spokesman for the agency, said in an emailed statement. "All of them are mangers with the highest in middle management."

Bosch, which is also being investigated by the U.S. Department of Justice, has been caught up in the VW diesel scandal that emerged in 2015 over allegations its employees may have helped rig software that helped the carmaker to cheat emission tests. Earlier this year, Stuttgart prosecutors opened a similar probe into Bosch's role in connection with emission tests of Daimler cars.

A spokesman for Bosch said that while he can't comment on individual employees, the company "takes the overall allegations in diesel cases seriously and has been cooperating fully from the beginning of the probes."

The Stuttgart probe is running parallel to the central criminal investigation in Braunschweig, closer to VW's headquarters. That investigation is targeting nearly 40 people on fraud allegations related to diesel-emission software, including former VW Chief Executive Officer Martin Winterkorn.

Prosecutors' interest extends to multiple units in the VW family --including luxury brands Audi and Porsche. In addition, Stuttgart prosecutors are also reviewing a third case related to Bosch's cooperation with Fiat Chrysler Automobiles NV on software for diesel engines.¹

 $^{^1\} https://www.bloomberg.com/news/articles/2017-06-29/three-bosch-managers-targeted-asgerman-diesel-probe-expands.$

9

7

12

16 17

18

1920

2122

23

25

24

2627

28

COCONSPIRATORS²

10. Volkswagen Group of America, Inc. (hereinafter "VW Group") is a corporation organized and existing under the laws of the State of New Jersey, with its principal place of business at 2200 Ferdinand Porsche Dr., Herndon, Virginia 20171.

11. VW Group is engaged in the business of distributing new motor vehicles and related parts and accessories in all 50 states, and is the sole authorized distributor in the United States of VW-branded automobiles to a nationwide network of VW franchise dealers.

- 12. VW Group is a wholly-owned subsidiary of VWAG.
- 13. VW Group conspired with Bosch LLC and Bosch GmbH to commit the acts alleged herein.
- 14. Volkswagen AG (hereinafter "VWAG") is a German corporation with its principal place of business in Wolfsburg, Germany.
- 15. VWAG also conspired with Bosch LLC and Bosch GmbH to commit the acts alleged herein.
- 16. VWAG is in the business of designing, developing, manufacturing, and selling automobiles. It is the parent corporation of VW Group as well as Audi AG and Porsche AG.
- 17. VWAG, with the assistance of Bosch GmbH, engineered, designed, developed, manufactured and installed the defeat device software on the Affected Vehicles and exported these vehicles with the knowledge and understanding that they would be sold throughout the United States at VW-branded franchise dealers. VWAG also developed, reviewed and approved the marketing and advertising campaigns designed to drive sales of the Affected Vehicles.
- 18. VW Group and VWAG were and are at all times relevant to the allegations in this Complaint working in concert under the common objective to engage in the emissions fraud scheme described

² Plaintiff includes this section because of VW Group's and VWAG's crucial roles as coconspirators with Bosch LLC and Bosch GmbH. However, Plaintiff's have already voluntarily dismissed its claims against VW Group and VWAG and their inclusion in this Second Amended Complaint is not intended to displace the same.

12

15

18

20

21 22

23

24

25 26

27

28

herein. Each of VW Group and VWAG were and are the agents of each other and have acted and act for their common goals and profit. Therefore, all acts and knowledge ascribed to one of VW Group or VWAG are properly imputed to the other. VW Group and VWAG are referred to collectively herein as Volkswagen or "VW."

19. At all times relevant to this action, Volkswagen manufactured, distributed, sold, leased and warranted the Affected Vehicles under the Volkswagen, Audi and Porsche brand names throughout the United States. Volkswagen and/or its parents, affiliates and agents designed, manufactured, and installed the Clean Diesel engine systems in the Affected Vehicles, which included the "defeat device" manufactured by Bosch GmbH and programmed by Bosch GmbH and Volkswagen. Volkswagen and/or its parents, affiliates, and agents developed and disseminated the owner's manuals and warranty booklets, advertisements, and other promotional materials relating to the Affected Vehicles.

JURISDICTION AND VENUE

20. The United States District Court for the Eastern District of Virginia and this Court have subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331, because DAM's claims arise under the RICO Act, 18 U.S.C. § 1962. There is also diversity jurisdiction because DAM and Defendants reside in different states and damages incurred by Plaintiff are in excess of \$75,000. The United States District Court for the Eastern District of Virginia and this Court have supplemental jurisdiction over DAM's state law claims under 28 U.S.C. § 1367.

21. The United States District Court for the Eastern District of Virginia has personal jurisdiction over each Defendant pursuant to 18 U.S.C. §§ 1965(b) and (d).³ The United States District Court for the Eastern District of Virginia has personal jurisdiction over Defendants because

³ E.g., In re Heritage Bond Litig., 02-ML-1475 DT, 2004 WL 5639773, at *4 (C.D. Cal. Mar. 29, 2004) ("In case transferred for pre-trial purposes by the Judicial Panel on Multidistrict Litigation, the transferee court must apply the personal jurisdiction rules of the transferor state.").

they have minimum contacts with the United States, that judicial District and the State of Virginia, and intentionally availed themselves of the laws of the United States and that State by conducting a substantial amount of business throughout the State, including the marketing, advertising, lobbying, promotion, design, manufacture, distribution, testing, sale, lease and/or warranty of Volkswagen vehicles in that State and District. Further, VW Group has its principal office in that State and District. At least in part because of Defendants' misconduct as alleged herein, the Affected Vehicles ended up on that State's roads. Thus, Virginia's long-arm statute for personal jurisdiction has been satisfied. *See*, Va. Code Ann. § 8.01-328.1, (2017).

- 22. The United States District Court for the Eastern District of Virginia also has personal jurisdiction over all Defendants because Defendants purposefully directed false advertisements and misrepresentations to consumers and dealers in Virginia, and Defendants also purposefully placed the Affected Vehicles and "defeat devices" into the stream of commerce in Virginia.
- 23. Further, the United States District Court for the Eastern District of Virginia has personal jurisdiction over each Defendant under 18 U.S.C. § 1965(b), which provides nationwide jurisdiction in RICO cases where the court has personal jurisdiction over one or more RICO defendants and where jurisdiction is required to promote the ends of justice.
- 24. The United States District Court for the Eastern District of Virginia has personal jurisdiction over Bosch GMbH because it has purposefully availed itself of the laws of the United States and Virginia through its management and control over Bosch, LLC, and over the marketing, promotion, design, development, manufacturer, distribution, testing, certification and sale of hundreds of thousands of defeat devices installed in the Affected Vehicles sold or leased in the U.S., and specifically, Virginia.

15

16

17

20

21

22

23

24

25

26 27

28

-	25. In	the altern	ative, t	the Unite	d Sta	tes Dis	trict Co	urt for	the Easte	ern Dis	trict	of V	irginia	has
pers	onal	jurisdictio	n over	VWAG	and	Bosch	GmbH	under	Federal	Rules	of	Civil	Proced	lure
4(k)	(2).													

26. Venue is proper in the United States District Court for the Eastern District of Virginia pursuant to 28 U.S.C. § 1391, because: (i) Defendants conduct substantial business in this District and have intentionally availed themselves of the laws and markets of the United States and this District; and/or many of the acts and transactions giving rise to this action occurred in this District, including, inter alia, Volkswagen's business operations were headquartered in this District and Defendants' promoted, marketed, distributed and sold the Affected Vehicles to consumers in this District. Defendants sell a substantial number of automobiles in this District, have dealerships located throughout this District, and their misconduct occurred in part in this District. Venue is also proper under 18 U.S.C. § 1965(a), because Defendants are subject to personal jurisdiction in this District, as alleged in the preceding paragraph, VW Group resides in this District, and all Defendants have transacted affairs in this District.

27. The United States District Court for the Northern District of California has both subjectmatter and personal jurisdiction over this matter pursuant to the Transfer Order issued on January 12, 2018, by the United States Judicial Panel on Multidistrict Litigation that transferred for certain pretrial purposes this and other actions to the United States District Court for the Northern District of California, assigned to the Honorable Judge Charles R. Breyer. (MDL No. 2672, Doc. 4658).

FACTUAL ALLEGATIONS

- 28. Jason Kuhn has operated new automobile dealerships in Florida for the last twenty (20) years, including two Volkswagen-branded dealerships in the greater Tampa, Florida area.
- 29. Mr. Kuhn is the president and majority stockholder of DAM (through another Limited Liability Company, of which Mr. Kuhn is the managing member).

30. At all times material hereto, Mr. Kuhn's actions, unless otherwise specified, should be attributed to DAM because they were done in his in his capacity as president of DAM, an agent of DAM and for the benefit of DAM.

- 31. A few years ago, in the midst of the financial crisis, another VW dealership in New Port Richey, Florida, ran out of money and began defaulting on its mortgage. Mr. Kuhn had originally loaned the owner-operator of the store the money needed to construct the building and sold it back to him a year later. This transaction was financed by VW Credit, Inc. and it had required that Mr. Kuhn be a guarantor on the mortgage for the dealership's facility.
- 32. Fearing that the default on the mortgage by the owner-operator could implicate him as guarantor, Mr. Kuhn discussed purchasing the store outright from the current owner-operator with Volkswagen. Although, Volkswagen did not want Mr. Kuhn to own three (3) stores in the greater-Tampa area, it was important to Volkswagen that the New Port Richey store stayed open and did not close. Since, no other potential buyers materialized Volkswagen allowed Mr. Kuhn to take over ownership and operation of the New Port Richey VW dealership.
- 33. Therefore, Mr. Kuhn and Volkswagen struck an agreement wherein he would purchase the New Port Richey store, run it until the economy improved enough to find a buyer, and then divest himself of it so as to not maintain an outsized market share. DAM was the holding entity for Mr. Kuhn's ownership of the New Port Richey VW dealership. In return for helping Volkswagen keep the New Port Richey VW dealership open, Volkswagen, specifically Don Hughes, promised to find an opportunity for Mr. Kuhn and DAM to own another Volkswagen "point" or dealership location. At the time that this bargain was struck, a Volkswagen point included the ability to market and sell the Affected Vehicles, and more generally, TDIs, which were Volkswagen's most popular offerings and significantly increased the value of a Volkswagen point.

34. That agreement ultimately resulted in Mr. Kuhn and DAM receiving the Letter of Intent at the heart of the instant matter.

35. On August 30, 2013, VW Group issued a Letter of Intent to DAM, awarding it the ability to open a new VW-branded automobile dealership in Westerville, OH (hereinafter the "Westerville LOI"). (Exhibit A - Westerville LOI). Notably, the awarding of the Westerville LOI represented Volkswagen's fulfillment of its deal with DAM regarding the New Port Richey VW dealership divesture. The Westerville open point was specifically chosen by Mr. Kuhn and DAM because its planning volume, as analyzed and represented by Volkswagen, was the greatest of any open point available at the time.⁴ Again, this planning volume included substantial sales of TDIs, one of Volkswagen's most popular products at the time.

36. A Letter of Intent is a contract that requires the prospective automotive dealer to meet certain milestones related to opening the dealership (e.g., meeting financial capitalization requirements, obtaining suitable real property for the dealership site, completing construction by strict deadlines, etc.) in return for VW Group agreeing to execute a contract with the prospective dealer enabling it to market, sell and service VW-branded automobiles. Such a contract for the marketing, sale and service of VW-branded new automobiles is oftentimes referred to in statutes and the industry as a "Franchise Agreement."

37. A Letter of Intent is analogous in form to an option contract, in that it gives the holder of the option the right to purchase something of value, in this case, a Volkswagen dealership, if certain milestones are met. Option contracts have tangible and quantifiable value, which is derived from the value of the underlying asset. When the value of the underlying asset declines, so does the

⁴ Planning volume is the expected number of new vehicle sales annually for a given dealership. In 2014, Westerville VW's planning volume was 737. The planning volume and its accuracy is extremely important because it determines which of Volkswagen's requirements, both for real property and facilities, including the size of the real estate, service, sales and parts facilities, as well as for operating capital, the dealership will be required to meet.

value of the option contract. In this case, once the value of a Volkswagen new motor vehicle dealership declined, so did the value of a Letter of Intent to build a new Volkswagen franchise.

Notably, option contracts and thus Letters of Intent have actual, quantifiable, and concrete value.⁵

- 38. Notably, the Westerville LOI is severely slanted in favor of VW Group. (**Ex. A**). For example, DAM is required to indemnify, defend and hold harmless VW Group, but the duty does not also flow from VW Group to DAM. *Id.* at ¶ 17. Further, VW Group, in its sole discretion, can terminate the Westerville LOI, but there is no corresponding ability for DAM to terminate, no matter the situation. *Id.* at \P 16.
- 39. Furthermore, the Westerville LOI was presented to DAM in a "take it or leave it" fashion. DAM had no power to request modification of the terms or most of the substantive requirements of the Westerville LOI.
- 40. There is a great disparity in bargaining power between Volkswagen and DAM. Volkswagen holds all of the power in the franchisor/franchisee relationship and exerts similar power in negotiations with prospective dealers. This disparity in bargaining power has been recognized by legislatures nationwide and as a result they have enacted remedial legislation in an attempt to prevent abuses of power by manufacturers over their franchise dealers. *See, e.g.*, §§ 320.60-320.70, Fla. Stat. (2017).
- 41. Upon receipt of the Westerville LOI in August 2013, DAM set out to accomplish the milestones and in doing so expended substantial funds, both in seeking the initial award of the Westerville LOI as well as in working to fulfill its terms.
- 42. The Westerville LOI called for the VW-brand dealership to be located in a defined area generally-known as Northeast Columbus, Ohio, which is mostly compromised of the municipality

[SECOND AMENDED COMPLAINT] MDL 2672 CRB (JSC)

⁵ E.g., Eugene Fr. Brigham & Michael C. Ehrhardt, <u>Financial Management Theory and Practice</u> Ch. 9, at p. 325 (2008) (explaining the Black-Scholes Model for pricing option contracts).

of Westerville, even though Volkswagen knew that Westerville was particularly hostile to automobile dealerships. In fact, Westerville had never had a new dealership constructed within its city limits. This presented significant obstacles to the accomplishment of the milestones required in the Westerville LOI. So much so, that VW agreed to extend the Westerville LOI multiple times.

- 43. On June 6, 2014, VW Group issued an amendment to the original Westerville LOI extending the deadlines for DAM to complete construction and other construction-related objectives (hereinafter the "First Amended LOI"). Other than changes to these dates, the First Amended LOI was substantially and materially similar to the original Westerville LOI.
- 44. Similarly, on January 15, 2015, VW Group again issued an amended Westerville LOI extending the construction completion date and other construction-related deadlines (hereinafter the "Second Amended LOI"). Again, other than changes to the deadline dates, the Second Amended LOI was substantially and materially similar to the original Westerville LOI.
- 45. On July 22, 2015, after much back and forth and expense, DAM secured approval from the City of Westerville for the Final Development Plan for the proposed dealership.
- 46. This approval was secured at great expense to DAM. It expended substantial funds on, among other things, the option to purchase real property, design and architectural services for the proposed dealership, and securing permits and approvals from local governmental entities for the site of the proposed new automobile dealership.
- 47. Unfortunately, all of DAM's hard work and funds expended in reliance upon the Westerville LOI would lose much of its value in a matter of months.
- 48. On September 18, 2015, the United States Environmental Protection Agency ("EPA") issued a Notice of Violation ("NOV") detailing the deliberate fraud by VW Group. (Exhibit B September 18, 2015 NOV from EPA).

49. On November 2, 2015, the EPA issued a second Notice of Violation of the CAA (the "Second NOV") to VWAG and VW Group for similar, but not identical fraud as alleged in the First NOV. (Exhibit C - November 2, 2015 NOV from EPA).

- 50. The NOVs laid bare a surreptitious scheme to defraud regulators, dealerships, both existing and prospective, and customers alike and reversed years of success for Volkswagen diesel motor vehicles in the United States market. From 2009 to 2015, Volkswagen had sold or leased through its franchise dealers in the United States nearly 580,000 dirty diesels that Volkswagen's defeat device disguised as clean (the "Affected Vehicles"). The success of the Volkswagen brand, in no small part due to the popularity of the Affected Vehicles, allowed Volkswagen to require substantial facility investments from existing and prospective franchise dealers and caused existing and prospective franchise dealers to pay substantial premiums for franchise rights.
- 51. However, following the issuance of the NOV, the value of the Affected Vehicles plummeted. And, the Volkswagen brand's value is diminished through lost sales and service revenue and lost contractual relationships with present and future customers. Further, VW-brand dealerships are not as popular, profitable or as worthwhile an investment as they once were. Finally, the Westerville LOI is not as valuable as it was when Mr. Kuhn and DAM negotiated for it in return for operating the New Port Richey VW dealership nor is it worth what was when originally issued to DAM in August 2013. These losses are direct and quantifiable harms to DAM.
- 52. As detailed in the NOV, it was discovered that since at least 2009 certain VW-branded diesel automobiles were equipped with illegal "defeat devices" that enabled these automobiles to fraudulently pass emissions testing and obtain EPA Certificates of Conformity ("COC"), a necessity for sale in the United States. This conspiracy to circumvent EPA regulations and defraud consumers and dealers alike would become known as "Dieselgate."

53. As part of Dieselgate, defeat devices were installed on the following VW-brand automobiles: 1) VW Jetta 2.0 Liter Diesel Models from 2009-2015; 2) Volkswagen Jetta SportWagen 2.0 Liter Diesel Models from 2009-2014; 2) Volkswagen Beetle 2.0 Liter Diesel Models from 2012-2015; 3) Volkswagen Beetle Convertible 2.0 Liter Diesel Models from 2012-2015; 4) Volkswagen Golf 2.0 Liter Diesel Models from 2010-2015; 5) Volkswagen Golf SportWagen 2.0 Liter Diesel Models in 2015; 6) Volkswagen Passat 2.0 Liter Diesel Models from 2012-2015; and, 7) Volkswagen Touareg 3.0 Liter Diesel Models from 2009-2016 (hereinafter, collectively the "Affected Vehicles").

54. Dieselgate's roots can be traced back to the mid-2000s. The United States government had announced tougher emission regulations and environmentally-friendly automobiles such as the Toyota Prius were resounding successes. Volkswagen, seeking to greatly increase its market share in the U.S., wanted to piggy-back on the recent breakthrough success of the Prius and other vehicles, while offering a more "fun-to-drive," high performance automobile. Its solution was a newly-developed and sophisticated diesel engine, the EA189 TDI.

55. The EA189 TDI was billed as a "clean," "green," and environmentally-friendly high-performance engine option. Until then, diesel engines were most closely-associated with the thick, toxic smoke they emitted. Volkswagen set out to change that image with creative advertising and breakthrough innovation in emissions controls.

56. Internally, though, Volkswagen's engineers quickly realized making the EA189 TDI "clean" and compliant with EPA regulations would be much tougher than they envisioned. The CEO of VWAG, Martin Winterkorn, tasked two engineers, formerly of Audi AG, Ulrich Hackenberg and Wolfgang Hatz, with developing the technology to support a diesel engine that maintained performance of traditional gasoline engines with reduced CO₂ emissions, lower gas mileage, and met new, strict NO_X emission standards in the U.S.

5

10

13

11

17

18

16

19 20

21

22 23

24

25 26

27 28

57. Diesel engines are inherently more fuel efficient than traditional gasoline engines. But, their fuel efficiency comes at the cost of air pollution and emissions. Diesel emissions produce very high levels of NO_x. NO_x emissions can be reduced by tweaking the engines, but that, in turn, produces soot, a similarly-undesirable hydrocarbon emission. Diesel engines exist in a state of balance between these conditions, known as "rich" and "lean" states. A diesel engine in a rich state contains more fuel than air, which in turn tends to burn off less fuel and thereby produces higher amounts of soot, reduced fuel efficiency, and sluggish driving performance. On the other hand, the lean state contains more air than fuel and produces higher amounts of NO_X. Both states produce harmful emissions and for the EPA to designate a diesel car as a "clean" vehicle, it must produce both low soot and low NO_X.

58. Beginning in 2007, the EPA and the California Air Resources Board ("CARB") promulgated stricter NO_X emission standards, which required all diesel vehicles to produce 90% less NO_X than years prior. ⁶ This development and its coinciding with Volkswagen's "clean" diesel push into the United States presented substantial obstacles to Volkswagen's U.S. strategy.

59. Volkswagen explored two options for solving the emissions challenge: a system employing selection catalytic reduction ("SCR"), or the use of a lean NO_X trap ("LNT"). The SCR approach was promising, but expensive. It worked by injecting urea into a diesel vehicle's exhaust stream to react with the NO_X, converting it into harmless nitrogen and oxygen. On the other hand, the LNT was cheaper. LNT involved storing NO_X emissions in a separate compartment during vehicle operation until it was full. At this point, the system would burn off the stored NO_X by pumping an extra burst of fuel into the cylinders, most of which passed through to the converter, where it then burned the NO_X into nitrogen and oxygen. In addition to being cheaper, this option was also less

 $^{^6}$ Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, Environmental Protection Agency (Dec. 2000). http://www3.epa.gov/otag/highway-diesel/regs/f00057.pdf.

effective and resulted in lower fuel efficiency. VW leadership fractured over this vitally-important decision, with the LNT system ultimately winning the day.

60. Ultimately, though, Volkswagen engineers ran out of time to develop an LNT system that could accomplish their lofty aims. Feeling the now-notorious internal pressure from a former chief executive and management team that created a "culture where performance was driven by fear and intimidation" engineers decided to cheat to ensure that the "clean" diesel engines met U.S. emissions standards within the window in which VW sought to ramp up its U.S. sales and presence.⁷

61. Volkswagen executives and engineers devised the solution contained within the "defeat device." The "defeat device" was born from technology Volkswagen had used for years in Europe on Audi diesel engines to reduce noise. It was known as "Acoustic Function" or, in German, the "Akustikfunktion." Starting in the mid-2000s, Volkswagen engineers working with Bosch Diesel Systems (at both Bosch GmbH and Bosch LLC, as explained above) – as detailed further below – and with the knowledge of management, adapted Audi's "akustikfunktion" concept to the 2.0-liter and 3.0-liter diesel engines for Volkswagen and Audi models to be sold in the U.S.

62. On or about May 17, 2006, a VW engineer emailed employees in the VW Brand Engine Development department and described aspects of the software. He cautioned against using it in its current form because it was nothing more than a mechanism to detect, evade and defeat U.S. emissions cycles and tests. As he explained (in German): "within the clearance structure of the pre-fuel injection the acoustic function is nearly always activated within our current US '07-data set. This function is pure [cycle-beating] and can like this absolutely not be used for US '07." But, VW executives refused to heed this warning.

⁷ Bob Lutz, *One Man Established the Culture That Led to VW's Emissions Scandal*, ROAD & TRACK (Nov. 4, 2015), http://www.roadandtrack.com/car-culture/a27197/bob-lutz-vw-diesel-fiasco/.

63. VW executives, including Richard Dorenkamp (Head of VW's Engine Development After-Treatment Department) and Jens Hadler (Head of VW Brand Engine Development and Head of Diesel Engine Development), authorized the creation and installation of this software with the knowledge that it was a defeat device. It has been reported that the decision to cheat the EPA, CARB, and countless other regulators was an "open secret" in VW's engine development department, as it was necessary in order for the "EA 189 engine to pass U.S. diesel emissions limits within the budget and time frame allotted." With the knowledge and assistance of Bosch GmbH, the resulting defeat device was incorporated into the software operating the TDI engines in the Affected Vehicles.

64. The defeat device that Defendants installed in the Affected Vehicles to evade emission testing is software code residing in the vehicles' electronic control unit. All modern engines are integrated with sophisticated computer components to manage the vehicle's operation. In diesel vehicles, this software is known as electronic diesel control ("EDC"). The EDC installed in the Affected Vehicles is formally referred to as the Electronic Diesel Control Unit 17 (also known as "EDC Unit 17," "EDC 17," and "EDC17").

65. EDC17 was used in a number of different manufacturers' automobile models. Bosch GmbH and Bosch LLC, through their employees in the Bosch Diesel Systems group, worked with each manufacturer that uses the EDC17 to create a unique set of specifications and software code to manage the vehicle's engine operation. Bosch GmbH and Bosch LLC were highly protective of the proprietary code and programming that operate the EDC17. Bosch GmbH had detailed agreements with manufacturers that govern the use, modification, and programming of the EDC17, which prevents manufacturers from making modifications to the EDC17 that are not known, approved, and tested by Bosch GmbH.

17

19

20

22

24

25

26

66. Bosch's EDC17 controls emissions by periodically reading sensor values, evaluating
control functions, and controlling actuators based on the control signal. ⁸ Based on sensor input
EDC17 controls and influences the fuel combustion process including, in particular, fuel injection
timing, which affects engine power, fuel consumption, and the composition of the exhaust gas. ⁹

- 67. All Bosch EDCs, including the EDC17, run on complex, highly proprietary engine management software over which Bosch exerts near-total control. In fact, the software is typically locked to prevent customers, like Volkswagen, from making significant changes on their own. Accordingly, both the design and implementation are interactive processes, requiring Bosch's close collaboration with the automaker from beginning to end.
- 68. The EDC17, as programmed, is a defeat device installed on the Affected Vehicles to surreptitiously evade emissions regulations. Bosch GmbH, Bosch LLC and Volkswagen worked together to develop and implement a specific set of software algorithms for implementation in the Affected Vehicles, including algorithms to adjust fuel levels, exhaust gas recirculation, air pressure levels, and urea injection rates in vehicles equipped with SCR systems. 10
- 69. The EDC17 in the Affected Vehicles was programmed to recognize when a vehicle was undergoing emissions testing based on the specific, required engine machinations for proper emissions testing in the U.S. When the EDC17's algorithm detected that the vehicle was on a dynamometer (and, therefore, undergoing an emission test), software code within the EDC17 downgraded the engine's power and performance and upgraded the emissions control system's performance by switching to a "dyno calibration," temporarily reducing emissions to legal levels.

⁸ Moritz Contag, et al., How They Did It: An Analysis of Emission Defeat Devices in Modern Automobiles, p.4 (2017). ⁹ *Id*.

¹⁰ Some later models of the Affected Vehicles had SCR emission systems rather than LNT systems. But no matter the emissions system, all the Affected Vehicles employed "defeat devices."

14

16

20

23

24 25

26

27 28 Once the EDC17 detected that the emissions test was complete, it would then enable a different "road calibration" that caused the engine to return to full power and efficiency while reducing the emissions control systems' performance, and consequently, caused the car to spew up to forty (40) times the legal limit of NO_X emissions.

70. This workaround was illegal. And, according to the New York Attorney General, Volkswagen management knew the use of these devices to detect the test and change the calibrations was illegal, as they studied the issue extensively during 2006-2007 when preparing to launch their vehicles in the U.S. market.

71. On or about October 5, 2007, Jens Hadler presided over a contentious meeting regarding the trajectory of Volkswagen's plan to increase U.S. market penetration. Technical problems had led to internal disagreements among members of the VW Group team responsible for ensuring vehicles met U.S. emissions standards. At the conclusion of the meeting, Hadler authorized Richard Dorenkamp to proceed with the project knowing it was only through the use of the defeat device software that the vehicles could hope to pass U.S. emissions tests. And, on or about October 17, 2007, slides containing explicit engineering terms for the defeat device were sent to Mr. Hadler and other executives. Hadler responded (in German) "[w]e shall never present this anywhere and will also not distribute it."

72. The Clean Air Act ("CAA") expressly prohibits "defeat devices," defined as any auxiliary emissions control device "that reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use." 40 C.F.R. § 861.803-01; see also id. § 86.1809-10 ("No new light-duty vehicle, light-duty truck, medium-duty passenger vehicle, or complete heavy-duty vehicle shall be equipped with a defeat device."). Moreover, the CAA prohibits the sale of components used as defeat devices, "where the person knows or should know that such part or component is being offered for sale or

15 16

17 18

19

21

22 23

24

25 26

27 28 installed for such use or put to such use." 42 U.S.C. § 7522(a)(3). Finally, in order to obtain a COC, automakers must submit an application which lists all auxiliary emission control devices installed in the vehicle, a justification for each, and explanation of why the control device is not a defeat device.

73. Thus, in order to obtain the COCs necessary to sell their vehicles, Volkswagen did not disclose, and affirmatively concealed, the presence of the test-detecting and performance-altering software code that it developed with engineers from IAV¹¹, Bosch GmbH and Bosch LLC within the EDC17 from government regulators, thus making that software an illegal "defeat device." In other words, Volkswagen lied to the government, its franchise dealers, both existing and prospective, consumers and the public at large. And at every step of the way, Bosch Diesel Systems, through its employees at Bosch GmbH and Bosch LLC, knew and aided in the fraud.

74. Because the COCs were fraudulently-obtained, and because the Affected Vehicles did not conform "in all material respects" to the specifications provided in the COC applications, the Affected Vehicles were never covered by a valid COC, and thus, were never legal for sale, nor were they EPA and/or CARB compliant, as represented. Volkswagen and Bosch Diesel Systems (in particular employees at Bosch LLC, which appeared to take the lead for Bosch Diesel Systems in interactions with regulators in the United States) hid these facts from the EPA, other regulators, prospective and existing franchise dealers, and consumers. Volkswagen continued to sell and lease the Affected Vehicles through franchise dealers to the driving public despite their illegality, and with the complicity of Bosch.

electronics and vehicle development. Volkswagen is an IAV client. IAV Automotive Engineering Inc. is a subsidiary of IAV based in the U.S. IAV employees were part of the working group that included Bosch GmbH, Bosch, LLC, VW Group and VWAG employees that

had a common purpose of designing and implementing a defeat device in U.S.-based diesel Volkswagens. IAV is not named as a defendant in this matter.

¹¹ IAV GmbH ("IAV") is a limited liability company headquartered in Berlin, Germany. IAV is an engineering company in the automotive industry that designs products for powertrain,

20

22

25

26

27 28

75. Notably, these continuing sales and leases made Volkswagen appear to be selling more cars, growing its market share in the U.S., and a much more attractive and lucrative investment for prospective franchise dealers, like DAM. Also, these continued sales and leases inflated the expected profits that DAM used in evaluating how much land to obtain, how big a facility to build, how much inventory it needed to house, how much service business it could expect, and ultimately, how profitable it could expect the Westerville VW dealership to be. Specifically, Volkswagen represented to DAM that in 2014 the "planning volume" for the Westerville VW dealership was 737 vehicles. This incorporated a substantial number of Affected Vehicles, which Volkswagen knew at the time were illegal and did not conform with US laws and regulations.

76. James Robert Liang was a member of Volkswagen's development department from 1983 to 2008 and then Leader of Diesel Competence for VW Group from 2008 to 2015. Liang was indicted by a federal Grand Jury for his role in the Volkswagen-IAV-Bosch conspiracy. In pleading guilty to fraud and other charges, Liang admitted that he and several co-conspirators knowingly designed, authorized, and managed the production of an EA 189 diesel engine that could only comply with U.S. emissions standards by using an illegal defeat device. He and others knowingly attended meetings with the EPA in Ann Abor, Michigan on or around October 3, 2006, and with CARB in El Monte, California on or around October 5, 2006, where they presented the engine as one which complied with U.S. emissions standards to obtain COCs.

77. Similarly, Mr. Liang and Mr. Dorenkamp met with EPA officials in Ann Arbor on or around March 19, 2007, and with CARB officials on or around March 21, 2007, to summarize the EA 189 engine design and proposed operation of emissions control systems, while concealing its defeat device.

78. Volkswagen's illegal workaround was enabled by its close partnership with Bosch Diesel Systems, which enjoyed a sizable portion of its annual revenue from manufacturing parts used in

18

19

20

21

22 23

24 25

26

27

28

Volkswagen's diesel vehicles. 12 Bosch Diesel Systems employees at both Bosch LLC and Bosch GmbH were well aware that Volkswagen was using its emissions control components as a defeat device and, in fact, worked with Volkswagen to develop the software algorithm specifically tailored to the Affected Vehicles. Although Bosch GmbH reportedly "advised" Volkswagen as early as 2007 that the components should only be used for internal testing, not for manipulation of the engine in emission testing, ¹³ it knew (or certainly should have known) that its lip service would be ignored, and that the components would be used as defeat devise. Bosch Diesel Systems supplied Volkswagen with approximately 11 million such emission control components over seven years which, in itself, belies the official company line that it did not know.

79. Volkswagen, likewise, knew better – VW itself is a recidivist violator of the CAA. In July of 1973, the EPA sought legal action against VW America by the Department of Justice based on a claim that defeat devices were installed in 1973 Volkswagen vehicles. The matter was swiftly settled for \$120,000 the following year. 14 And, in June of 2005, VW America entered into a consent decree with the DOJ, wherein it paid \$1.1 million penalty for failing to notify the EPA of emissions problems in certain vehicles manufactured by Volkswagen in Mexico. 15

80. Because the COCs were fraudulently obtained, the Affected Vehicles were never covered by valid COCs, and thus, were never offered legally for sale. Volkswagen hid these facts from the EPA, CARB and other state regulators, existing and prospective franchise dealers (including DAM)

¹² Approximately 50,000 of Bosch's 375,000 employees worked in the diesel-technology operations branch of Bosch, and Volkswagen was the biggest diesel manufacturer in the world. See Bosch probes whether its staff helped VW's emissions rigging, Automotive News (Jan. 27, 2016), http://www.autonews.com/article/20160127/COPY01/301279955/bosch-probes-whetherits-staff-helped-vws-emissions-rigging.

¹³ VW scandal: Company warned over test cheating years ago, BBC (Sept. 27, 2015), http://www.bbc.com/news/business-34373637.

¹⁴ Rich Gardellsa, et al., VW had previous run-in over 'defeat devices', NBC News (Sept. 23, 2015), http://www.cnbc.com/2015/09/23/vw-had-previous-run-in-over-defeat-devices.html. ¹⁵ Consent Decree, *United States v. Volkswagen of Am., Inc.*, Case No. 1:05-cv-01193-GK (D.D.C. June 15, 2005 and Nov. 4, 2005), ECF Nos. 1-2.

8

9

10

1112

13

15

16

14

1718

19 20

2122

23

2425

26

27

28

¹⁶ VW-MDL2672-02570091 (English translation).

81. Each Bosch entity, through the cross-entity Bosch Diesel Systems group, played a critical role in the scheme to evade U.S. emission requirements in the Affected Vehicles. In a letter to Volkswagen in 2007, Bosch GmbH acknowledged that use of the defeat device software was illegal. In 2008, Bosch GmbH wrote Volkswagen and expressly demanded that Volkswagen indemnify Bosch (the specific entity was referred to by Bosch GmbH as "Bosch") for anticipated liability arising from the use of the Bosch-created "defeat device" (Bosch GmbH's words), which Bosch GmbH knew was "prohibited pursuant to ... US Law." Volkswagen apparently refused to indemnify Bosch GmbH, but Bosch GmbH nevertheless continued to develop and deliver the socalled "akustikfunktion" (the code name used for the defeat device) for Volkswagen for another seven years. During that period, Bosch GmbH and Bosch LLC concealed the defeat device in communications with U.S. regulators once questions were raised about the emission control system in the Affected Vehicles, and Bosch Diesel Systems, through employees at Bosch LLC, went so far as to actively lobby regulators to promote Volkswagen's "Clean Diesel" system in the United States. Bosch LLC's efforts, taken together with evidence of Bosch LLC and Bosch GmbH's actual knowledge that the "akustikfunktion" operated as an illegal defeat device, demonstrate that Bosch

¹⁷ VW-MDL2672-00744825.

¹⁸ Jack Ewing, *Audi Executive Resigns After Suspension over VW Emissions Scandal*, NY. Times (Dec. 4, 2015), http://www.nytimes.com/2015/12/05/business/international/ulrich-hackenberg-suspended-over-volkswagen-emissions-scandal-resigns.html.

LLC and Bosch GmbH were both knowing and active participants in the decade-long illegal enterprise to defraud U.S. consumers, regulators, franchise dealers.

82. Bosch's EDC17 was the technology behind Volkswagen's ambition. The EDC17 and the development of its underlying software were integral to Volkswagen's entire diesel strategy, which by late 2006 included creating software to sense when the vehicles were in test mode and then manipulate the emission control system at that time. This could not have been accomplished without years of collaborative work with Bosch Diesel Systems employees at both Bosch GmbH and Bosch LLC.

83. As early as February 2005, an internal feasibility study drafted by Ulrich Hackenberg (Audi Development Chief) mentioned Bosch's EDC17 as part of a strategy to reduce diesel vehicle emissions of nitrogen oxides ("NOx") by creating a change in engine electronics.¹⁷ The study discussed diesel strategies in the U.S. market in light of tightening U.S. emission standards. As discussed above, shortly after the cheating scandal became public, Volkswagen suspended Hackenburg, and he later resigned.¹⁸

84. Bosch marketing materials (which did not specify the particular Bosch entity involved) made clear that the EDC17 was not one-size-fits-all. Instead, it was a "[c]oncept tailored for all vehicle classes and markets" that could "be adapted to match particular requirements [and] ... be used very flexibly in any vehicle segment on all the world's markets." The EDC17 was tailored and adapted by modifying the sophisticated software embedded within the electronic control unit ("ECU"). Bosch Diesel Systems, through employees at GmbH and Bosch LLC manufactured, developed, and provided the ECU and its base of software to Volkswagen for the Affected Vehicles.

[SECOND AMENDED COMPLAINT] MDL 2672 CRB (JSC) 85. Engineers at IAV, Volkswagen and Bosch Diesel Systems (including employees of Bosch LLC and Bosch GmbH) worked together to modify and adapt the software for the EDC17, and to create specifications for each vehicle model. Indeed, customizing a road-ready ECU is an intensive three- to five-year endeavor involving a full-time Bosch Diesel Systems presence at an automaker's facility. Bosch Diesel Systems and its customers work so closely together that it purposefully locates its component part manufacturing facilities close to its carmaker customers' manufacturing plants.

86. All Bosch ECUs, including the EDC17, run on complex, highly proprietary engine management software over which Bosch GmbH and Bosch LLC exert near-total control. In fact, the software is typically locked to prevent customers, like Volkswage, from making significant changes on their own. The defeat device was just such a software change – one that would allow modifications to the vehicle's emission control to turn on only under certain circumstances – that Volkswagen could not have made without employees and management of Bosch LLC and Bosch GmbH knowing and participating.

87. The Bosch entities' security measures further confirm that customers (carmakers) cannot make significant changes to Bosch software without Bosch involvement. Bosch boasts that its security modules protect vehicle systems against unauthorized access in every operating phase, meaning that no alteration could have been made without either a breach of that security – and no such claims have been advanced – or Bosch GmbH's knowing participation. ¹⁹

88. Unsurprisingly, at least one car-company engineer has confirmed that Bosch GmbH maintains absolute control over its software as part of its regular business practices:

I've had many arguments with Bosch, and they certainly own the dataset software and let their customers tune the curves. Before each dataset is released it goes back to Bosch for its own validation.

¹⁹ Reliable Protection for ECUs (May 12, 2016), https://www.escrypt.com/company/single-news/detail/reliable-protection-for-ecus/.

1	Bosch is involved in all the development we ever do. They insist on						
2	being present at all our physical tests and they log all their own data, so someone somewhere at Bosch will have known what was						
3	going on.						
4 5	All software routines have to go through the software verification of Bosch, and they have hundreds of milestones of verification,						
6	that's the structure						
7	The car company is <i>never</i> entitled by Bosch to do something on their own. ^[20]						
8	Thus, Bosch GmbH and Bosch LLC cannot convincingly argue that the development of the						
9	"akustik" device was the work of a small group of rogue engineers.						
10	89. In fact, Volkswagen's and Bosch GmbH's work on the EDC17 reflected a highly unusual						
11	degree of coordination. It was a massive project that required the work of numerous Bosch						
12 13	engineers and coders for a period of more than ten years, or perhaps more. ²¹ Although, Bosch						
14	GmbH publicly introduced the EDC17 in 2006, it had started to develop the engine management						
15	system years before. ²²						
16	90. The size and complexity of the development of EDC17 is captured by a spreadsheet that						
17	lists entries for work done by Volkswagen and Bosch employees on the EDC17 from late 2003 to						
18	2009. Each entry is given one of six descriptors: enhancement, new feature, service, support						
19	surface, sur						
20							
21	20 Minhard Tardam EDA Landin Dalam WW Disable Comment Dalam Comment Dala						
22	 Michael Taylor, EPA Investigating Bosch over VW Diesel Cheater Software, Car and Driver (Nov. 23, 2015), http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software/. Approximately 50,000 of Bosch's 375,000 employees worked in the diesel-technology operations branch of Bosch, and Volkswagen was the biggest diesel manufacturer in the world. See Bosch Probes Whether Its Staff Helped VW's Emissions Rigging, Automotive News (Jan. 27, 						
23							
24							
25	2016), http://www.autonews.com/article/20160127/COPY01/301279955/bosch-probes-whether-ts-staff-helped-vws-emissions-rigging. 22 Feb. 28, 2006 Bosch press release, "The brain of diesel injection: New Bosch EDC17 engine management system," http://www.bosch-presse.de/presseforum/details.htm						
2627							
28	?txtID=2603&locale=en.						

²³ VW-MDL2672-02559780.

integration, or bug/defect. In total, the spreadsheet contains 8,565 entries and lists hundreds of Bosch employees, including employees at Bosch LLC and Bosch GmbH.²³

91. The joint enterprise is also memorialized in a series of agreements between Bosch GmbH and Volkswagen dating back to as early as mid-2005, reflecting negotiations that date prior to January, 2005. On April 7, 2005, for example, Bosch GmbH employees executed the "Framework Development Agreement for Software Sharing in EDC/MED17 Control Unit Projects from the Robert Bosch (RB) Diesel Systems (DS) And Gasoline Systems (GS) MotorVehicle Units." VWAG countersigned the agreement on September 26, 2005.

92. Importantly, the agreement defined software sharing as "the handing over of BOSCH software in the form of object code by BOSCH to VW, so that VW can use this BOSCH software as a basis for developing VW modules for specific EDC/ME(D)17 projects using software development environments from BOSCH." The agreement states that "[p]roviding the VW modules and integrating them to form a complete software product requires close cooperation between the Parties."

93. The contract also outlined responsibilities for software sharing and co-development. Throughout development, the contract dictated Bosch GmbH was to retain control over the software. While Bosch GmbH provided (and owned) the object code, and Volkswagen developed (and owned) the modules, the parties agreed that "BOSCH carries out any modifications to the BOSCH software that are necessary in order to integrate the intended VW modules at the expense of VW." The agreement further specifies that "Bosch" would monitor the software, test the implementation of Volkswagen modules, and grant written approval to Volkswagen modules. Only if everything met Bosch's standards would it then "deliver[] the final complete software product

[SECOND AMENDED COMPLAINT] MDL 2672 CRB (JSC)

24

25 26

27

28

for VW to use in combination with a BOSCH control unit."²⁴ Thus, Bosch GmbH plainly had knowledge of the defeat device code and needed to conduct extensive testing before delivering the product to VW.

94. Yet another document demonstrates the tight grip that Bosch GmbH maintained over EDC17 software and any modifications made to it. On February 20, 2006, VWAG and Bosch (signed by employees in Bosch GmbH's Diesel Systems division), entered into a supplemental agreement concerning the use of "expanded software" documentation for the EDC17 and EDC16 (its predecessor).²⁵ Pursuant to this agreement, Bosch GmbH identified 35 named individuals, affiliated with either VWAG or IAV (Ingenieurgesellschaft Auto und Verkehr), who were granted access to expanded documentation for the EDC17 for specific functions relating to emissions. Any changes to the list of persons to be given access required the explicit consent of Bosch GmbH, and the access was temporary and nontransferable. Critically, the agreement stated that "[t]his right of use shall not include the right to the change, modify or use the DOCUMENTATION with thirdparty control units."²⁶ Bosch GmbH thereby tightly controlled both who could access the expanded documentation and the scope of their use of such materials.

95. A later agreement between Bosch GmbH and Volkswagen, this one from June 12, 2006, governed the implementation, integration, project management, and delivery of certain EDC 17 software functions for diesel vehicles that VWAG had requested from Bosch GmbH. This agreement, too, made clear that any changes not explicitly detailed in the agreement would require further approval from Bosch GmbH.

96. Along the same lines, several years later, in a February 5, 2011 agreement, Bosch GmbH granted VWAG a license to further develop Bosch Denoxtronic functions for the treatment of

²⁴ Volkswagen produced an English translation of the agreement at VW-MDL2672-03752699.

²⁵ Volkswagen produced an English translation of the agreement at VW-MDL2672-03752757

²⁶ VW-MDL2672-03752757.

5 6

4

7 8

9

10 11

12 13

14

15 16

17

18 19

20

21 22

23

24

25 26

27

28

exhaust from diesel engines. Again, the contract is clear that Bosch maintains rights over the Denoxtronic functions.

97. In summary, as the EA 189 project moved to series production in 2009, Bosch GmbH's documented role was to provide to Volkswagen executable software for installation in the EDC17 controller at the VW production line.²⁷ Bosch Diesel Systems insisted that it control the definition of the EDC17 software, test the software using bench top and vehicle testing, produce the final software release for series production, and deliver the software to Volkswagen for installation in the EA 189 engines used in the Affected Vehicles. Bosch GmbH's firm control over the development of and modifications to EDC17 is undeniable. It is inconceivable, then, that Bosch GmbH and Bosch LLC did not know that the software it was responsible for defining, developing, testing, maintaining and delivering, and that Bosch LLC promoted, lobbied, and coordinated for use in the United States, contained an illegal defeat device.

98. Bosch Diesel Systems employees at Bosch LLC and Bosch GmbH were in on the secret and knew that Volkswagen was using Bosch Diesel System's software algorithm as an "on/off" switch for emission controls when the Affected Vehicle was undergoing testing. As noted above, it has been said the decision to cheat was an "open secret" at Volkswagen. 28 It was an "open secret" at Bosch Diesel Systems as well.

99. The roots of the "akustikfunktion" – and likely the cheating – can be traced back to the late 1990's when Audi devised software called the "akustikfunktion" that could switch off certain

²⁷ VW-MDL2672-03752699.

²⁸ Georgina Prodham, Volkswagen probe finds manipulation was open secret in department, Reuters (Jan. 23, 2016), http://www.reuters.com/article/us-volkswagen-emissions-investigationidUSKCN0V02E7. See also Jay Ramey, VW chairman Poetsch: Company 'tolerated breaches of rules', Autoweek (Dec. 10, 2015), http://autoweek.com/article/vw-diesel-scandal/vw-chairmanpoetsch-company-tolerated-breaches-rules (it was necessary for the "EA 189 engine to pass U.S. diesel emissions limits within the budget and time frame allotted").

 $\frac{32}{28}$

functions when the vehicle was in a test mode.²⁹ The "akustik" term is derived from the function's ability to modify the noise and vibration produced by the engine. News articles report that, in 2006, VWAG further developed this "akustikfunktion" for the Affected Vehicles.³⁰

100. Written communications between and within Bosch Diesel Systems and Volkswagen describe the "akustikfunktion" in surprising detail. In emails sent as early as July 2005 from VWAG's Andreas Specht to Bosch employees. Specht discussed emissions measurements from vehicles using the "akustikfunktion" in connection with U.S. emission compliance. A February 2014 PowerPoint prepared by VWAG explained that the akustikfunktion measured speed, acceleration, and engine operation to determine whether a vehicle is undergoing testing. There is no question that the code comprising the akustikfunktion was developed by Bosch: The technical agreement for it was drafted by Bosch GmbH and contains a legend that "Robert Bosch GmbH reserves all rights in the event of industrial property rights."

101. On November 13, 2006, VWAG's Dieter Mannigel (Software Design, U.S. Diesel Engines, Drivetrain Electronics) circulated via email a PowerPoint presentation prepared for VWAG's Rudolf Krebs (who joined Volkswagen from Audi in 2005) about how the "akustikfunktion" is activated and deactivated in recognition of emissions-related environmental

²⁹ https://global.handelsblatt.com/edition/413/ressort/companies-markets/article/dieselgates-roots-stretch-back-to-audi?ref=MTI5ODU1.

³⁰ Volkswagen Probe Finds Manipulation Was Open Secret in Department: Newspaper", *Reuters* (Jan. 23, 2016), http://www.reuters.com/article/us-volkswagen-emissions-investigation-idUSKCN0V02E7. VW Group Chairman, Hans Dieter Poetsch, explained that a small group of engineers and managers was involved in the creation of the manipulating software. *See* VW Chairman Poetsch: Company 'Tolerated Breaches of Rules'", *Auto Week* (Dec. 10, 2015), http://autoweek.com/article/vw-diesel-scandal/vw-chairman-poetsch-company-tolerated-breaches-rules. *See also* "Scandal Explained", *BBC*, Dec. 10, 2015, http://www.bbc.com/news/business-34324772; Sept. 18, 2015, http://www.autocar.co.uk/carnews/industry/vw-emissions-scandal-how-volkswagens-defeat-device-works.

³¹ VW-MDL2672-02559611.

³² VW-MDL2672-02572122.

conditions, such as temperature and pressure. The presentation explained that the existing vehicles functioning with different drive cycles could not pass U.S. emission tests, and thus proposed the release of the "akustikfunktion" to be driving dependent.³³

On November 20, 2006, Mannigel emailed his colleagues to summarize a meeting with Krebs, at which the PowerPoint described above was likely presented. Krebs had emphasized the importance of not getting caught by U.S. regulators using the "akustikfunktion," and warned that the function must be explainable to regulators. Krebs was skeptical about using the akustikfunktion in the U.S. market due to potential regulatory and legal exposure, and Mannigel was nervous that regulators would be able to detect the "akustikfunktion." Nevertheless, Mannigel reported, Volkswagen was going ahead with the expanded "akustikfunktion" with Bosch GmbH.³⁴ It is likely this was the meeting at which VW decided to use the "akustikfunktion" as a defeat device to evade compliance with U.S. emission requirements.

103. Well after the defeat device was developed and integrated into hundreds of thousands of Affected Vehicles, Volkswagen and Bosch GmbH and Bosch LLC continued to work together to refine and maintain it. For example, both Bosch GmbH and Volkswagen were involved in the calibration of the defeat devices for the Affected Vehicles. A November 2014 email from VWAG's Juergen Hintz, entitled "Akustikfunktion," relayed a telephone call with a Bosch GmbH employee about the "akustikfunktion" and Volkswagen's role. VWAG's C. Arenz responded that while he had been responsible for the operation of the "akustikfunktion," Bosch GmbH was responsible for its calibration. In fact, Arenz disclosed that he planned to meet with Bosch GmbH

³³ VW-MDL2672-02559527. The email attached an internal Volkswagen PowerPoint that describes the "akustikfunktion" as activated in recognition of emission related environment conditions and proposed it as a solution to the registration emissions certification problems in the U.S. (VW-MDL2672-02559528).

³⁴ VW-MDL2672-02559526.

employees (along with Michael Brand) about calibrating the "akustikfunktion" the following week.³⁵ In another email, Hintz wrote that a Bosch GmbH employee told him that Bosch GmbH would be making certain changes to the "akustikfunktion" based on Volkswagen's specifications.³⁶

- 104. In sum, Bosch GmbH and Bosch LLC worked hand-in-glove with Volkswagen to develop and maintain the akustikfunktion/defeat device, and to market diesel technology and obtain necessary regulatory approval for Volkswagen's diesel offerings.³⁷
- 105. By 2007, and likely earlier, Bosch Diesel Systems employees at Bosch GmbH were critical not only in developing the "akustikfunktion," but also in concealing it. On March 9, 2007, a Bosch employee emailed VW AG's Mathias Klaproth (a technical developer) and Dieter Mannigel with the subject of "Erweiterungen Akustikfunktion" (in English, "Further Development of the Acoustic Function"). 38 The Bosch employee confirmed that Bosch GmbH would remove the description of the enhanced "akustikfunktion" from Volkswagen's fuel pump specification sheets D2250 and D2278. Klaproth and Mannigel agreed not to list the function in documentation in the U.S., but disagreed whether to disclose it in Europe. Klaproth then took the Bosch employee off the email chain and insisted the "akustikfunktion" would be applied to the European projects, to which Mannigel responded that he would contact Klaproth off-line.
- 106. Bosch GmbH was concerned about getting caught participating in the defeat device fraud. As reported in the German newspaper, Bild am Sonntag, and a French publication, a

22

23

24

25

26

³⁵ VW-MDL2672-02569895.

³⁶ Translation at 00387135.

³⁷ MDL2672-02570091; VW-MDL2672-02559611; VWMDL2672-02559515.

³⁸ VW-MDL2672-02559515.

22

23

25

26

27

28

Volkswagen internal inquiry found that in 2007 Bosch warned Volkswagen by letter that using the emissions-altering software in production vehicles would constitute an "offense."³⁹⁴⁰

107. Bosch GmbH expressed concerns that use of the defeat device it had created would violate U.S. law. These concerns culminated in a June 2, 2008 letter from a Bosch GmbH employee to Volkswagen's Thorsten Schmidt on Bosch GmbH letterhead in which "Bosch" demanded that Volkswagen indemnify Bosch for any liability arising from the creation of a "defeat device," as Bosch itself called it in English. Through the letter, Bosch sought to clarify the roles and responsibilities of Volkswagen and Bosch regarding the development of the EDC 17, and demanded that Volkswagen indemnify Bosch for any legal exposure arising from work on the defeat device:

The further development [of the EDC17] requested by your company will result, in addition to the already existing possibility of activating enriched data manually, in an additional path for the potential to reset data to act as a "defeat device." We ask you to have the attached disclaimers executed by your company.⁴¹

The letter uses the words "defeat device" in English, and further explained that "[t]he usage of a defeat device is prohibited pursuant to ... US Law (CARB/EPA)."⁴²

108. Bosch GmbH's June 2, 2008 letter also warned Volkswagen that the software modifications Volkswagen requested could allow "the certified dataset [to be] replaced with another, possibly non-certified data set[,]" which could, in turn, cause "the vehicle's general operating license (registration) [to] become void." Creating two data sets on emission compliance

³⁹ Automotive News (Sept. 27, 2015)

^{24 (}http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says); VW Scandal: Company Warned over Test

Cheating Years Ago", BBC, Sept. 27, 2015, http://www.bbc.com/news/business-34373637.

⁴⁰ http://www.autonews.com/article/20150927/COPY01/309279989/bosch-warned-vw-about-illegal-software-use-in-diesel-cars-report-says.

⁴¹ VW-MDL2672-02570091 (English translation).

⁴² *Id.* at -92.

⁴³ *Id.* at -93.

15

17

18

21

23

24

25 26

27

28

was illegal under U.S. law. Bosch GmbH knew this, and that is why it requested indemnification from Volkswagen.

- 109. Two Bosch GmbH executives signed the proposed indemnification; the signature lines for Volkswagen were left blank. When Volkswagen's Hermann Middendorf responded to one of the Bosch GmbH executives, he did not deny the existence of the defeat device, but instead attacked Bosch for involving "the lawyers."44
- 110. Following Bosch GmbH's June 2, 2008 letter, Bosch GmbH continued to develop and sell to Volkswagen hundreds of thousands of the defeat devices for U.S. vehicles even after its express, written recognition that its software was being used in the Affected Vehicles as a "defeat device" that was "prohibited pursuant to . . . US Law."
- 111. VWAG and Bosch LLC and Bosch GmbH continued over the next few years to refine the defeat device and market the diesel technology in VW's vehicle offerings. Refinement of the defeat device was a lengthy and complicated process that required concealing its existence from the onboard diagnostic system, which was intended to report emission controls to comply with U.S., and particularly California's, requirements. In a July 18, 2011 email, Audi's Olaf Busse proposed tying the activation of the "akustikfunktion" more directly to steering angle, instead of vehicle temperature, which was proving to be problematic. This request coincided with inquiries from CARB about on-board diagnostics issues. VWAG's Hanno Jelden (Head of Powertrain Electronics), worried that the change would be too obvious and could not be explained to regulators.45
- 112. Top VW executives Denner, Winterkorn, Horn, Muller, and Stadler were also in on the defeat device "secret." Notes from a May 28, 2014, meeting between Bosch and Volkswagen

⁴⁴ *Id.* at -90.

⁴⁵ VW-MDL2672-0259489. Jelden was subsequently suspended in connection with the emissions scandal.

executives at VW headquarters reflect that the topic of "akustikfunktion" was discussed in the context of Volkswagen's and Bosch's partnership in the U.S. market. VWAG's Friedrich Eichler (Powertrain Development Chief) mentioned the importance of the "akustikfunktion" in Bosch diesel engines. Bosch GmbH also had participants at the meeting including Mr. Denner. 46

- 113. The Bosch entities not only kept Volkswagen's dirty secret safe, they went a step further and actively lobbied lawmakers to push "Clean Diesel" in the U.S., including making Affected Vehicles available for regulators to drive.
- As early as 2004, Bosch Diesel Systems announced a push to convince U.S. automakers that its diesel technology could meet tougher 2007 U.S. emission standards.⁴⁷ Its efforts ended up being a multiple-year, multi-million dollar effort, involving key players from both Bosch GmbH in Germany and Bosch LLC in the U.S. Following the launch of its new EDC systems in 2006, the Bosch entities hired mcapitol Managers, a lobbying firm to promote its "Clean Diesel" products on Capitol Hill and with the EPA. In Washington, DC, mcapitol Managers lobbied on Bosch GmbH and Bosch LLC's behalf to defeat a proposal that would have favored hybrid vehicle technology over "Clean Diesel" vehicles.
- 115. Bosch also coordinated studies to advance diesel technology in the U.S, including a study in 2006 with the goal of developing coordinated strategies to accelerate advancements of light duty diesel technology in the U.S.⁴⁸
- 116. Bosch's promotion of diesel technology specifically targeted the U.S. For example, Bosch LLC put on "Diesel Days in California," "Deer Conference: EGT Focus," and "SAE World Congress in Detroit." In 2008, Bosch LLC and VW America co-sponsored the "Future Motion

²⁶ VW-MDL2672-02569909.

⁴⁷ Mar. 8, 2004, Edmund Chew, Autonews.

⁴⁸ VW-MDL2672-06136031.

14 15

16

18

21

22

24

25 26

27

28

and held private meetings with regulators, in which it proclaimed extensive knowledge of the specifics of Volkswagen technology, including calibrations necessary for the Affected Vehicles to

Bosch LLC hosted multi-day conferences open to many regulators and legislators

Made in Germany-Second Symposium on Modern Drive Technologies" at the German Embassy in

Washington, D.C., with the aim of providing a venue for "stakeholders to gain insight into the latest

technology trends and engage in a vital dialogue with industry leaders and policymakers."⁴⁹

comply with emissions regulations.

117.

118. For example, in April 2009, Bosch LLC organized and hosted a two-day "California Diesel Days" event in Sacramento, California. Bosch LLC invited a roster of lawmakers, journalists, executives, regulators, and NGOs with the aim of changing perceptions of diesel from "dirty" to "clean." The event featured Affected Vehicles as ambassadors of "Clean Diesel" technology, including a 2009 VW Jetta "green car." The stated goals were to "generat[e] a positive perception of Clean Diesel in passenger vehicles" and to "educate California stakeholders about the immediate benefits [of] Clean Diesel passenger vehicles" in reducing emissions. A key feature of the event included "Bosch Vehicles Being Deployed." 50 Attendees included various Bosch LLC and Bosch GmbH employees, including members of the Diesel Systems department.

119. In 2009, Bosch also became a founding member of the U.S. Coalition for Advanced Diesel Cars. One of this advocacy group's purposes included "generating awareness to legislators and regulators on the benefits of "Clean Diesel" technology for passenger cars, through engagement in policy, regulatory and advocacy activities."

120. Another example of Bosch LLC's U.S. lobbying is the 2009 "California Green Summit." As part of its "Clean Diesel" partnership with Volkswagen, Bosch LLC deployed two

⁴⁹ VW-MDL2672-00234383.

⁵⁰ *Id.* 115-45; VW-MDL2672-03331605.

4

10

9

12

11

13 14

15 16

17

18

19 20

21

22

23 24

25

26

27

28

⁵³ *Id*.

2009 Jetta TDI Volkswagens to attendees with the express purpose of "Influencing California," and inviting CARB, the Western Automotive Journalist Organization, and many others.

- 121. In September 2009, Bosch held a Diesel Technology Forum in California. An employee of Bosch GmbH in the Diesel Systems department attended, as did VW's Stuart Johnson, R. Dorenkamp and G. Pamio, along with Juergen Peter. Following this forum, in October 2009, Mightycomm (Bosch's California lobbyist) outlined a proposal for "OEM Vehicle Placement Program targeting influential California NGOs and Regulators."51 This memo was addressed to Bosch employees at "Bosch Diesel Systems." Mightycomm specifically stated "[v]ehicles placed with CARB would have to be ... newer models that can withstand possible dynamometer testing. While we do not anticipate a vehicle placed with CARB would be inspected, examined, or tested on a dynamometer, there is no assurance some CARB staff won't want to do this."52 On the other hand, Mightycomm advised not to worry about a vehicle being tested by the California Energy Commission ("CEC") "as the CEC is not equipped to conduct such inspections." 53
- 122. In 2010, Bosch LLC sponsored the Virginia International Raceway with the support of the 2010 Volkswagen Jetta Cup Series. This included the 2009 "Sidewinder" which Bosch featured for its "performance exhaust system."
- 123. In its lobbying on behalf of "Clean Diesel," Bosch LLC had to continually cover up the dirty secret of the defeat device in the Affected Vehicles. In a January 13, 2010 memo addressed to some Bosch employees Mightycomm noted that "Clean Diesel has been ranked the green car of the year" two years in a row – 2009 and 2010. And yet Bosch Diesel Systems employees at Bosch GmbH and Bosch LLC knew the Affected Vehicles could not obtain the results being advertised without activating the defeat device.

⁵¹ VW-MDL2672-15182932.

⁵² *Id*.

124. Some Bosch LLC employees even presented on "Clean Diesel" technology before the CEC on June 19, 2013, specifically pinpointing "key influencers," such as specific NGOs that have not traditionally engaged CARB, "who we need to reach, rally and motivate."⁵⁴

In its efforts to promote "Clean Diesel," including the Affected Vehicles, Bosch acted on behalf of its global Bosch Diesel Systems group. As an example, Bosch put on a two-day presentation on June 27-28, 2007, about meeting the demands of U.S. emission legislation, where it focused on lowering emissions in diesel vehicles. Each of the presentation's 30 pages bears both the "Bosch" name and "Bosch Engineering GmbH" but makes no mention of Bosch LLC. The aforementioned memo from Mightycomm was addressed to "Bosch Diesel Systems." And each page of the presentation for California Diesel Days bears the label "BOSCH" in emboldened red type without distinguishing between Bosch GmbH and Bosch LLC.

126. Prior to becoming CEO in 2012, Volkmar Denner climbed the corporate ladder in Bosch GmbH's Engine ECU Development division, managing the development and sale of automotive engine computers, such as the EDC units that Volkswagen used as defeat devices. In 2006, Denner joined Bosch Germany's Board of Management and was later responsible for research and advance engineering, product planning, and technology coordination across the company's three business sectors from July 2010 until his appointment as CEO. Denner has

⁵⁴ VW-MDL2672-00885348.

⁵⁵ VW-MDL2672-05676990.

⁵⁶ VW-MDL2672-03331605.

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	

agitated for the company to become more like a "start-up," 57 and to develop a "culture of failure," 58
where risk taking is rewarded, in an attempt to replicate the "California venture capitalist model." 59
Denner set the tone at the top of Bosch as a member of Bosch's Board of Management and later
CEO. He embraced the Silicon Valley culture of moving fast, taking risks, and asking for
forgiveness rather than permission.

127. As he rose in the ranks, Denner worked to foster Bosch GmbH's relationship with key corporate partners, like Volkswagen, which brought in billions of dollars in annual revenues. Denner immersed himself in the day-to-day business of Bosch's important customers. Illustrating how important Volkswagen was to Bosch, Denner communicated directly with Volkswagen's Winterkorn about the companies' relationship and Bosch products sold to Volkswagen. For example, when Bosch ran out of oxygen sensor parts that Volkswagen ordered for its vehicles, Denner reached out directly to Winterkorn. Denner and Winterkorn directly communicated over parts delays and shortages, implying that each was not a manager who governed from afar, but rather was intricately involved in the details of operations.

In May 28, 2014, Denner participated in a meeting with Winterkorn and other Bosch 128. GmbH, Bosch LLC and Volkswagen executives at Volkswagen headquarters concerning their partnership in the U.S. market. Among other topics, participants discussed the "akustikfunktion" in

⁵⁷ See Interview with Bosch GmbH Director Volkmar Denner, Jan. 21, 2015, available at http://www.uni-stuttgart.de/forschung-leben/forschung-persoenlich/ persoenlich_artikel0005.en.html.

23

24

25

22

⁵⁸ See Martin-Werner Bucdhenau, The Multinational Start-up: The engineering and electronics giant Bosch is putting aside its conservative tendencies and investing in a new innovation unit that it hopes will rival successful start-up incubators, Handelsblatt, Nov. 28, 2014, available at https://global.handelsblatt.com/edition/64/ressort/companies-markets/article/the-multinationalstart-up.

26

⁵⁹ See Nick Gibbs, German auto firms try to nurture Silicon Valley boldness, Automotive News, Nov. 22, 2015, available at http://www.autonews.com/article/20151122/OEM06/ 311239956/german-auto-firms-try-to-nurture-silicon-valley-boldness.

28

5

11

12 13

14 15

16

17 18

19

20 21

22

23

24 25

26

27

28

60 VW-MDL2672-02569909.

Volkswagen diesel vehicles. ⁶⁰ Thus, Denner and Winterkorn were aware of the illegal use of the
defeat devices at least by May 2014. In sum, Bosch GmbH and Bosch LLC each played a crucial
role in the fraudulent enterprise and profited handsomely from it. It is no exaggeration to say that
Bosch GmbH provided Volkswagen with the most critical elements necessary to create an engine
capable of being (fraudulently) represented as achieving the most stringent U.S. emission standards
and Bosch LLC directly participated in selling the fraud. All of the Bosch components provided to
the Volkswagen production line combined - including the ECU, software, fuel system, sensors,
and harness – accounted for a sizeable portion of the total material cost of the engines. Volkswagen
is very big business for Bosch Diesel Systems, in particular for Bosch GmbH and Bosch LLC.

129. In summary, all Defendants were integrally involved in concealing the illegal use of the defeat devices to fraudulently obtain COCs from the EPA and their equivalent from CARB. Employees of Defendants presented at conferences, communicated with regulators, conducted testing, accepted awards for the "green" diesel technology, and continually updated and refined the "defeat devices" to evade detection. This concealing of the illegal activities (alleged in greater detail *infra*) continued up through the issuance of the First NOV, despite Volkswagen's knowledge of DAM's continued expenditures to build a new VW-brand dealership pursuant to the Westerville LOI and its reliance upon Volkswagen's stated planning volumes for inventory and sales that included substantial numbers of the Affected Vehicles and more generally, TDIs.

130. Despite Volkswagen's ascension to become the world's biggest automaker, Volkswagen sales lagged in the United States. Volkswagen has sought to improve sales in the United States by touting the performance and reliability of its vehicles and its environmental leadership. Volkswagen's 2013 Annual Report emphasizes that "Volkswagen intends to become the global economic and environmental leader among automobile manufactures by 2018" and that

> [SECOND AMENDED COMPLAINT] MDL 2672 CRB (JSC)

"[w]e are focusing in particular on the environmentally friendly orientation and profitability of our vehicle projects." Volkswagen's false proclamations of environmental friendliness were calculated to, and did artificially increase its brand value - because it increased the value of existing and prospective VW dealers relationships with their clients, and the volume and profitability of their relationships with prospective clients – and the price dealerships paid for the rights to sell VW cars, including DAM's agreement with Volkswagen related to the New Port Richey VW store and its acceptance of a valuable LOI in return for this risk.⁶¹

- 131. Volkswagen advertised extensively to perpetuate the fraud. Affirmatively referring to its cheating TDI engines as the "world's cleanest diesel engines" on the "Environment" tab of its website and touting the allegedly-reduced CO₂ emissions on its "Clean Diesel" tab through September 2015.
- 132. While secretly using defeat devices to bypass emission testing, Volkswagen publicly declared a landmark victory – touting that it had successfully optimized its engines to maintain legal emissions, while simultaneously enjoying the cost savings of a LNT system. Volkswagen claimed it accomplished this by monitoring and adjusting combustion conditions and using a twostage exhaust gas recirculation system to reduce initial emissions, while neutralizing the remaining ones with a LNT to comply with U.S. law.⁶² Volkswagen branded and advertised this purportedly revolutionary technology to American consumers as "Clean Diesel" TDI technology.

24

25

26

27

28

⁶² See Hadler, et al., Volkswagen's New 2.0l TDI Engine Fulfils the Most Stringent Emission

⁶¹ The fraudulently inflated costs to dealers not only included amounts dealers paid to acquire dealerships and franchise rights, like DAM's agreement with Volkswagen over the New Port Richey VW store, but also the capital investment costs Volkswagen could demand from DAM upon its receipt of the Westerville LOI. By artificially and fraudulently inflating its brand value, VW could impose and require prospective franchise dealers to make capital investments, such as building new showrooms. DAM's investment in the Westerville VW proposed site, planning and design are direct losses to it because the massive decrease in customers willing to by VW cars has substantially diminished the actual returns that DAM expected from its investment (and its earlier agreement regarding operating the New Port Richey VW store).

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

133. Volkswagen broadly boasted about the performance and environmental cleanliness of its engine systems. In an October 2008 release, Volkswagen bragged:

The Jetta TDI is amongst the ten most fuel efficient vehicles on the US market. In the recently published "Fuel Economy Guide 2009" the EPA (Environmental Protection Agency) listed the Jetta TDI in the top ten low consumption and low emissions vehicles.

In the current edition of the publication, the Jetta 2.0 l Clean TDI, introduced to the market two months ago, is praised particularly for its excellent consumption figures - it has a fuel consumption of 5.7 litre per 100 kilometre. Moreover, the Jetta Clean TDI also fulfils stringent Californian emission standards. This was achieved through modifications within the engine and by implementing an exhaust treatment system developed especially by Volkswagen and which reduces nitrogen oxide emissions (NOx) by up to 90 percent. The central element of the exhaust treatment system is the NOx storage catalytic converter. [63]

- 134. Since introducing the 2.0L TDI Clean Diesel engine in 2008, Volkswagen has touted it as a "fantastic power train" that "gives very good fuel economy" and "is also good for the environment because it puts out 25% less greenhouse gas emissions than what a gasoline engine would ... cuts out the particulate emissions by 90% and the emissions of nitrous [sic] oxide are cut by 95% ... [and is] clean enough to be certified in all 50 states."
- 135. The TDI Clean Diesel engines are turbocharged and directly inject fuel into each cylinder via fuel injectors. Volkswagen has stated, "[t]he superior qualities of the 2.0 Liter TDI engine with common rail injection systems are oriented towards future challenges in acoustics, comfort, and exhaust gas after-treatment ... confirming Volkswagen's role as a pioneer in diesel technology."

2324

25

26

27

28

Standards, Internationales Wiener Motorensymposium 2008; see also Self Study Program 826803: 2.0 Liter TDI Common Rail BinS ULEV Engine, Volkswagen of America, Inc. (2008).

63 See http://www.volkswagenag.com/content/vwcorp/info_center/en/news/2008/10/vw_in_fuel_economy_guide.html (last accessed Sept. 23, 2015) (emphasis added).

⁶⁴ Statement of Volkswagen Group of America, Inc.'s Chief Operating Officer Mark Barnes, to The Business Insider, October 9, 2009.

136. Volkswagen's advertising, which keyed on the unique combination of clean, efficient, and highly performing, was very effective. In fact, Volkswagen has become the largest seller of diesel passenger vehicles in the United States.

- 137. In an October 2009 interview with Business Insider, when asked "[w]hat is the advantage of a diesel over a hybrid," VGoA's Chief Operating officer, Mark Barnes, stated: "It's also good for the environment because it puts out 25% less greenhouse gas emissions than what a gasoline engine would. And thanks to the uniqueness of the TDI motor, it cuts out the particulate emissions by 90% and the emissions of nitrous[sic] oxide are cut by 95%. So, a very very clean running engine. Clean enough to be certified in all 50 states."⁶⁵
- 138. Volkswagen doubled-down on "clean" and "green" vehicles. Being highly efficient, fun, and "clean" are the central messages for Volkswagen's diesel engine campaign.
- Volkswagen also touted the performance characteristics of the TDI Clean Diesel, claiming that clean emission technology did not sacrifice its 236 lbs/ft of torque and turbocharged Clean Diesel engine. In a recent 2015 Volkswagen Golf sales brochure, Volkswagen stated "With the 2.0L TDI engine, you'll appreciate every fuel-efficient mile with the EPA-estimated 45 hwy mpg. But that's only half the story. Step on the pedal and feel the 236 lb-ft of torque and let the performance tell the other half."
- 140. Volkswagen also claimed that TDI Clean Diesel models "typically have a higher resale value versus comparable gasoline vehicles."
- 141. But even when Volkswagen knew that EPA investigators had discovered or at the very least suspected their fraud and the defeat device, it continued to deceive its customers and its franchise dealers like Plaintiffs through false recalls and false advertising.

⁶⁵ Gayathri Vaidyanathan, *Volkswagen Preps for a Diesel Revolution*, The Business Insider, Oct. 9, 2009, http://www.businessinsider.com/volkswagen-preps-for-adiesel-revolution-2009-10.

142. Beginning in April 2015, Volkswagen issued VW Action Code 2306, which was a recall for Clean Diesel equipped vehicles. Volkswagen claimed that the recall was a "repair" and that it "improved" the engine management system. But many owners recorded a marked decrease in fuel efficiency and performance after the recall was completed.

- 143. Volkswagen continued its aggressive campaign to dupe its customers and dealers into believing its cars were clean and environmentally friendly. In advertisements appearing on its webpage as recently as September 21, 2015, Volkswagen extended the deceit. These ads have now been stripped from Volkswagen's websites.
- 144. Volkswagen's now dubious concern for the environment extended beyond its Clean Diesel campaigns. On the "Environment" page of its website, Volkswagen claims that it takes "environmental responsibility very seriously. When it comes to making our cars as green as possible, Volkswagen has an integrated strategy focused on reducing fuel consumption and emissions, building the world's cleanest diesel engines and developing totally new power systems, which utilize new fuel alternatives."
- 145. Volkswagen trumpeted its apparent environmental *bone fides* when the Audi A3 TDI and VW Jetta TDI were named the 2010 Green Car of the Year and the 2009 Green Car of the Year. Ironically, the tag line of the most recent Clean Diesel advertisements was "*Promise kept*." 66
- 146. On the Volkswagen Clean Diesel webpage, it continued to mislead consumers, touting the supposedly reduced greenhouse gas emission of the Clean Diesel engine system.⁶⁷

⁶⁶ See http://www.vw.com/features/clean-diesel/ The content has since been removed.

⁶⁷ See http://www.audiusa.com/technology/efficiency/tdi?csref=116751439289858719 The content has since been removed.

147.	Volkswagen even produced a number of brochures throughout 2010-2014 touting
ts various	TDI models of the Affected Vehicles as fuel efficient, environmentally friendly, lower
emissions	than other diesels, and cleaner. 68

148. Volkswagen's advertisement of the "environmental friendliness" of "clean" diesel engines increased its market share in the United States allegedly because its Clean Diesel models were extraordinarily clean, EPA-certified in all 50 states, and powerful. This artificially inflated the value of the brand, and therefore, the value of any potential new VW-brand dealership like DAM was awarded with the Westerville LOI. And, with the brand value artificially-inflated, Volkswagen could demand substantial capital investment expenditures in return for the right to operate a VW-brand dealership. DAM relied upon this inflated brand value in assessing the anticipated (and expended) capital investment to open the proposed Westerville VW dealership versus its potential profitability. Further, this brand value also affected the actual value of the Westerville LOI, for which DAM had specifically negotiated with Volkswagen.

149. Upon information and belief, employees at VW knew of the unraveling fraud since at least early 2014, but did not share this information with existing or prospective VW-brand franchise automobile dealers. In May 2014, West Virginia University's Center for Alternative Fuels, Engines & Emissions published results of a study commissioned by the International Council on Clean Transportation ("ICCT") that found that certain of the Affected Vehicles' real world NOx and other emissions exceeded the allowable EPA emission standards ("WVU Study"). ⁶⁹ This would be the beginning of the end for Volkswagen and Bosch, but they would not go lightly. In

⁶⁸ E.g., Brochure: 2012 Volkswagen Family,

http://cdn.dealereprocess.com/cdn/brochures/volkswagen/2012-family.pdf.; Brochure: 2014
Volkswagen Beetle, https://static.beepi.com/Brochures/23900.pdf.

⁶⁹ See Final Report: In Use Emissions Testing of Light-Duty Diesel Vehicles in the United States, International Council on Clean Transportation (May 15, 2015),

 $http://www.theicct.org/sites/default/files/publications/WVU_LDDV in-use_$

ICCT_Report_Final_may 2014.pdf.

fact, Volkswagen continued to take steps to actively conceal the fraud from the public, both existing and prospective franchise dealers, and regulators.

- The ICCT researchers had been comparing the real-world performance of "clean" diesel vehicles in Europe with reported results and noted numerous discrepancies. Since the U.S. emission regulations were significantly more stringent than its European counterparts, the ICCT sought to test the equivalent U.S. "clean" diesel cars, presuming that they would run cleaner. West Virginia University was a qualified and enthusiastic partner, as they had already been engaged in the study of heavy truck emissions.
- 151. Shockingly, the study showed that, contrary to testing lab results, real world driving of Volkswagen "clean" diesel vehicles produced levels of NOx up to 40 times higher than legal limits promulgated by the EPA and CARB.
- 152. VW, and key members of the conspiracy, learned of the results of this study prior to its publication on or around May 15, 2014. Oliver Schmidt was the General Manager in charge of VW's Engineering and Environmental Office in Auburn Hills, Michigan from around 2012 to around February 2015. In the course of that work, he knew of the illegal defeat device and, at various times, concealed it from the EPA and the public. Between March and September 2015 Schmidt worked in Wolfsburg, Germany as a principal deputy to Neusser (Head of Engine Development).
- 153. On or around April 2, 2014, Oliver Schmidt opened an email which, in part, stated that "current diesel PEMS measurements in USA on road by CARB, WVU with ICCT show significantly increased NOx-RDE factors. (study to be published soon.)." In this email, the term PEMS refers to the device used to measure vehicle emission on the road and RDE refers to realdrive emissions. Later that day, Schmidt wrote to a colleague about VW's compliance with U.S. emissions regulations, saying: "[i]t should first be decided whether we are honest. If we are not

honest, everything stays as it is. ICCT has stupidly just published measurements of N[orth] A[merica] R[egion] diesel off-cycle, not good." In this context, NAR refers to the North America region.

- 154. On or about April 7, 2014, ICCT engineers received an e-mail from a VW Group official seeking to verify which vehicles in the study were manufactured by VW.
- 155. 195. On or about April 15, 2014, Schmidt forwarded a copy of the ICCT presentation to Bernard Gottweis. Gottweis formally led a team called the "Product Safety Taskforce," which concentrated on crisis prevention and management. But he was primarily known within VW as the "fire-fighter." He had come out of retirement to help with the diesel emissions issue. Schmidt's email to Gottweis concluded by saying "[w]ithin VW GOA, the study is known only to EEO, and we want to keep it that way for the time being."
- 156. On or about April 28, 2014, members of the VW task force presented the findings of the ICCT study to Bernard Gottweis. Their presentation included an explanation of the potential financial consequences VW could face if the defeat device was discovered by U.S. regulators, including but not limited to fines per vehicle, which were substantial.
- 157. Around the same time (late April 2014), a presentation in Wolfsburg noted that "[o]ne option was for Volkswagen to offer to update the engine software. But the update would not bring emissions down to the required levels."
- 158. Michael Horn, former President and CEO of VW America, admitted in his December 14, 2015 responses to additional questions from the House of Representatives Subcommittee on Oversight and Investigations Committee on Energy and Commerce he may have learned of the study as early as April 2014 and no later than May of 2014.
- On or about May 9, 2014, a VW employee emailed to Schmidt and others which, in part, read:

As mentioned orally, VW currently in [North American Region] has the problem of high off cycle emissions, that the EPA has now found out about and we must respond. Oliver Schmidt as head of EEO plans to speak directly with [a VW supervisor] here in Herndon at the end of May. I cannot tell you anything before that because the investigations are still underway in [Wolfsburg]. Dr. Neusser is directly involved in it as head of development.

Schmidt replied "Are you crazy? Recall the email."

- 160. The ICCT study was formally published on May 15, 2014. On that same day, Schmidt emailed to Michael Horn with an attachment that, in part, says "[t]he contents of this [ICCT] study cannot be ignored." The attachments also outlined the possible penalties VW was facing. The fines and cars in the attachment could justify a fine of up to \$18 billion dollars. Michael Horn admitted that, shortly after the publication of the study, he was briefed about the penalties for non-compliance with U.S. emissions standards and that the EPA may detect "defeat devices."
- 161. When regulators learned of the results of the WVU Study, they came to Volkswagen for an explanation. Volkswagen, rather than coming clean and admitting what it already knew, denied the allegations and blamed allegedly-faulty testing procedures in the WVU Study. Internal communications at the time show that Volkswagen knew this to be an untrue explanation and that its employees as high up as the CEO of VW Group were still actively seeking to conceal the existence of the defeat devices.
- 162. For example, on or around May 23, 2014, Gottweis sent a memo to Winterkorn about possible repercussions from the ICCT study. He warned that "[t]here is no well-founded explanation for the dramatically higher NOx emissions that can be given to the authorities," so "[i]t is to be suspected, that the authorities will examine the VW systems to see whether Volkswagen has installed engine management software (a so-called Defeat Device)." A Volkswagen press

⁷⁰ Geoffrey Smith, *VW's ex-CEO Winterkorn 'Knew About Defeat Device in Early 2014*,' Fortune (Feb. 15, 2016), http://fortune.com/2016/02/15/vw-ceo-winterkorn-defeat-device/.

15

18

22

23

23	71
24	71 Sc ch
25	ch
25	So

diesel-scheme-unraveled.

26

27 28 release later acknowledged that Winterkorn received this memo in May 2014 "in his extensive weekend mail."

163. Further, on or about October 1, 2014, VW employees gave a presentation to CARB regarding the WVU Study results and discrepancies identified in NO_X emission between dynamometer testing and road driving. In responding to questions, VW employees did not reveal that the existence of the defeat device explained the discrepancies in NO_X emissions. Instead, they gave CARB false reasons for the discrepancies in NO_X emissions, including driving patterns and technical issues.

164. Then, in December 2014, Volkswagen issued a recall purportedly to update emission control software in the Affected Vehicles. CARB and the EPA conducted follow-up testing of the Affected Vehicles in the laboratory and during normal road operation. CARB discovered that none of the technical issues identified by Volkswagen explained the NO_X emission test results. For months, internal communications between Volkswagen employees evidence a struggle for "creative" responses or "plausible explanations" to inquiries from regulators. 71

165. This internal struggle culminated at an August 19, 2015, meeting with CARB officials in California. In contravention of VW's directives and scripts prepared for its employees attending the meeting, a VW employee disclosed that VW diesel vehicles used different emissions treatment depending on whether the vehicles were on the dynamometer or on the road, thereby effectively admitting that VW had cheated U.S. emissions tests.

E.g., William Boston, Volkswagen Ex-Chairman's Account Is Latest Plot Twist in Emissions candal, Wall Street Journal (Feb. 9 2017), https://www.wsj.com/articles/volkswagen-exnairmans-account-is-latest-plot-twist-in-emissions-scandal-1486689385?mod=e2tw.; Bertel chmitt, Lies, Damned Lies, And Volkswagen's Dieselgate, Forbes (Feb. 12 2017) http://www.forbes.com/sites/bertelschmitt/2017/02/12/lies-damned-lies-and-volkswagensdieselgate/#34dfa16918eb.; McLaughlin, David et al. VW Officials Destroyed Files, E-Mails as Diesel Scheme Unraveled Bloomberg (Jan. 11 2017), https://www.bloomberg.com/news/articles/2017-01-12/vw-officials-destroyed-files-e-mails-as-

On the same day, back in Germany, some executives and engineers began deleting documents relating to U.S. emissions. Mr. Hadler told an assistant to dispose of a hard drive containing emails from him and other supervisors. In fact, from around August 2015 through around September 2015, approximately forty (40) or more VWAG and Audi employees altered, concealed, or destroyed or caused to be altered, concealed or destroyed thousands of documents. In September 2015, at least two VWAG employees contacted Bosch employees and asked them to delete documents relating to the defeat device and emissions of diesel vehicles.

- 167. Finally, on September 3, 2015, Volkswagen employees finally disclosed at a meeting with the EPA and CARB that it had installed a sophisticated software algorithm on the 2.0-liter Affected Vehicles, which could detect when the car was undergoing emission testing on a test bench and switch the car into a cleaner running mode. During that meeting, Volkswagen admitted that the software was a "defeat device" forbidden by the CAA and state regulations. The First NOV would be issued about two weeks later.
- 168. However, Volkswagen continued to sell its 3.0-liter diesel models, despite similar, but no-yet-disclosed defeat devices being installed. Only after the Second NOV in November 2015 did Volkswagen finally bring an end to its fraudulent enterprise.
- By manufacturing, marketing, advertising and selling cars with defeat devices that allowed for higher levels of emissions than what was certified to the EPA, and higher levels than state and federal regulations allow, Volkswagen violated the Clean Air Act and state environmental regulations, defrauded its existing and prospective VW-branded franchise dealers, engaged in a criminal racketeering enterprise and engaged in unfair competition under state and federal law. Bosch was complicit in the fraud and criminal racketeering enterprise too.
- 170. Further, despite Volkswagen's public statements, its executives knew of this fraud. On October 17, 2015, Reuters reported that anonymous insiders, including a Volkswagen manager

and a U.S. official close to the government's investigation of the company, claimed that Volkswagen made several modifications to its emission defeat device software over the seven years the company has admitted to cheating. Such incremental updates to the software, which were made to accommodate new generations of engines during that timeframe, evidence a large group of employees making an ongoing effort to continue their deception. And, as detailed above, these modifications would have almost assuredly have been coordinated by and involved employees at Bosch Diesel Systems.

- On January 4, 2016, the Department of Justice ("DOJ"), on behalf of the EPA, filed a civil complaint against VWAG, VW Group, Volkswagen Group of America Chattanooga Operations LLC, Audi AG, Audi, Porsche AG and Porsche America for injunctive relief and the assessment of civil penalties for their violations of the CAA. In addition to alleging various violations of the CAA, the complaint states that the Defendants impeded the government's efforts to learn the truth about the emission irregularities related to the Affected Vehicles with material omissions and misleading information.
- 172. The DOJ also launched a criminal investigation into Volkswagen and several of its executives over the emissions cheating scandal. VW has been charged criminally and it pleaded guilty. In its plea agreement with DOJ, VWAG admitted to knowingly conspiring to commit wire fraud by materially misrepresenting Affected Vehicles compliance with the CAA and that they did so to defraud the buyers and lessees of those vehicles. VWAG also stipulated to certain factual allegations in Exhibit 2 of the plea agreement, which it agreed it will "neither contest the admissibility of, nor contradict...in any proceeding." The plea agreement is attached and those admissions contained in the statement of facts or Exhibit 2 to the plea agreement are incorporated

by reference as though fully set forth herein. (Exhibit D – Statement of Facts to Plea Agreement between Volkswagen AG and the United States of America dated March 10, 2017).⁷²

- 173. When the NOV was announced in September 2015, the value of DAM's Westerville LOI deteriorated greatly. The VW brand was now seen as less reliable. This perception not only devalued the existing dealerships, but also those dealerships that were planned but not yet opened, like Westerville VW.
- 174. This devaluation was exacerbated because the Affected Vehicles were sold at substantially higher premiums than the other offerings by Volkswagen. Therefore, removing these "premium" models from the vehicle mix offered by Volkswagen significantly dented the profitability outlook as well as the present value of existing and proposed franchise dealerships including DAM's.
- 175. Subsequent to the public announcement of the fraud, VW Group took other actions that further devalued the potential profitability and actual value of existing and proposed VW dealerships, including, but not limited to, removing many of the Affected Vehicles from the road, a significant source of potential revenue for franchise dealers in the form of service and parts sales.
- 176. Further, but for the expected sales and service opportunities presented by the Affected Vehicles (or diesel models similar thereto), DAM would have reconsidered its acceptance of the Westerville LOI and the concomitant capital investments. The popularity of the Affected Vehicles, driven by Volkswagen and Bosch's false advertising, lobbying of regulators and other actions, in no small part drove the perceived value of the Volkswagen brand, the profits DAM could expect as a result of the Westerville LOI and, the actual value of the Westerville LOI point.

⁷² Notably, many of the factual allegations contained herein are drawn directly from Exhibit D and therein, Volkswagen expressly admitted that the Statement of Facts in the Plea Agreement, attached to the agreement as Exhibit 2, "are true and correct" and that Volkswagen "agrees that it will neither contest the admissibility of, nor contradict, the Statement of Facts contained in Exhibit 2 in any proceeding."

But, following the issuance of the NOVs in late 2015, DAM did not cease working towards fulfilling the milestones of the Westerville LOI. Instead, DAM continued its efforts to fulfill the Westerville LOI, based on verbal representations from Volkswagen executives that they would financially assist the dealers until the dealerships had recovered from any loss of profits due to the fraud. These representations included, but were not limited to, a September 23, 2015 letter from Michael Horn to all dealers as well as talking points provided to Mr. Kuhn ahead of his trip to support Volkswagen in front of the U.S. Congress regarding Volkswagen's continued support of its dealers, existing and prospective, throughout the crisis.

- Then, in February 2016, after DAM's architect submitted its final draft of the proposed Westerville VW dealership for Volkswagen's approval, Volkswagen unexpectedly and arbitrarily demanded that DAM and its architect start the design process over from scratch. Notably, this final draft was the result of significant back and forth between Volkswagen, Volkswagen's consulting architects, City of Westerville officials, DAM and its architects. Despite all of this coordination, time and expense, Volkswagen was not satisfied and requested a complete redo.
- 179. Then, in April 2016, Volkswagen franchised motor vehicle dealers filed a classaction complaint against Volkswagen and Bosch for their losses from Dieselgate.
- 180. Subsequently, existing and prospective Volkswagen franchised dealers, including DAM's principal, Jason Kuhn were in active negotiations to settle claims that the dealers had against Volkswagen relating to the fraud, lost revenue, lost franchise value, lost profits, and lost value in the VW brand.
- 181. Jason Kuhn was the chairman of a committee of six VW dealers leading negotiations for the class of VW dealers. Mr. Kuhn is the owner-operator of other existing VW-brand dealerships and is also the president and majority owner of DAM. At the time of the negotiations,

Mr. Kuhn was insisting upon Volkswagen including the prospective VW dealers (i.e., those with outstanding LOIs like DAM) in any global settlement by Volkswagen with the franchise dealers and the existing franchise dealers were on board with this approach.

- In August 2016, over dinner in Virginia near VW Group's headquarters, Mark McNabb, then the Chief Operating Officer of VW Group, told Mr. Kuhn, that he and Volkswagen preferred not to include the prospective VW dealers in the settlement class because he would "personally deal with the LOI dealers and make it right," which specifically included DAM, Mr. Kuhn's prospective VW dealership.
- Based upon this representation, made in person once by Mr. McNabb and at least once over the phone, Mr. Kuhn allowed the removal of the LOI dealers, including DAM, from the settlement class. Importantly, Mr. Kuhn, as the chairman of the dealer advisory committee with regards to all of the dealers' claims against Volkswagen, had the ability to insist on the inclusion of LOI dealers in any settlement. Considering the relative size of the eventual settlement (over \$1 billion) and the relatively few number of LOI dealers (12), there was no objection from the existing VW dealers to the inclusion of the LOI dealers in the settlement class. Thus, based on Mr. McNabb's representations alone, Mr. Kuhn removed the LOI dealers from the scope of the settlement, which would have benefitted them, including DAM, greatly. Absent Mr. McNabb's representations, Mr. Kuhn and the other members of the dealer advisory committee would have continued to include the LOI dealers within the scope of the settlement class for the settlement that was being finalized.
- 184. Thereafter, Volkswagen and Mr. McNabb did not "make it right" and instead refused to compensate DAM for the loss in value of the Westerville LOI and its expenditures in reliance thereon, despite Mr. McNabb's representations to Mr. Kuhn regarding DAM and the other prospective VW dealers. But for Mr. McNabb's representations, Mr. Kuhn would have ensured

DAM's inclusion in any settlement with Volkswagen, entitling DAM to over \$3 million of the settlement pool pursuant to the tiered settlement values agreed upon for new points.

- 185. In addition to having to settle claims by existing and prospective dealers, Volkswagen was required to pay the United States Government as part of its criminal plea and also consumers that had purchased the fraudulently-certified Affected Vehicles. The combination of all of these settlements was a substantial sum of money even for a company the size of VW, totaling in the billions of dollars.
- 186. Before the settlement amount with the existing dealers was finalized, Volkswagen was indicating that the dealers should "not get greedy" because if the judgment or settlement amount was too large it had the possibility of sending Volkswagen into bankruptcy.
- 187. With the uncertainty surrounding the financial health of Volkswagen post-settlements, the bait-and-switch regarding LOI dealers' inclusion in the dealer settlement, the increasing costs to fulfill the Westerville LOI, and the severely diminished profitability outlook for both the Westerville VW dealership and the VW brand overall, DAM made a prudent business decision to mitigate its damages and stop spending money to fulfill the Westerville LOI. In other words, DAM decided to "stop throwing good money after bad."

TOLLING OF THE STATUTE OF LIMITATIONS

DAM had no way of knowing about Volkswagen's deception with respect to its Clean diesel engine system and "defeat device." It took the EPA and CARB investigations to uncover Volkswagen's deception, which involved sophisticated software manipulation by all Defendants. As reported in media outlets, it took CARB testing on a special dynamometer in a laboratory, open road testing using portable equipment, and the use of special testing devised by CARB to uncover Volkswagen's scheme and to detect how software on the engine's electronic control module was deceiving emissions certifications tests. Quite simply, Volkswagen was intent

on expressly hiding its behavior from regulators and consumers and therefore, the application of the discovery tolling rule is applicable.

- 189. Within the time period of any applicable statute of limitations, DAM could not have discovered through the exercise of reasonable diligence that Volkswagen was concealing the conduct complained of herein and misrepresenting its true position with respect to the emissions of the vehicles.
- 190. DAM did not discover and did not know of facts that would have caused a reasonable person to suspect that Volkswagen did not report information within its knowledge to federal and state authorities, its dealerships, or consumers; nor would a reasonable and diligent investigation have disclosed that Volkswagen had information in its possession about the existence of its sophisticated emissions scheme and that it opted to conceal that information. Nor in any event would such an investigation on the part of DAM have disclosed that Volkswagen valued profits over compliance with federal and state law, or the trust that DAM had placed in its representations, or that, necessarily, Volkswagen actively discouraged its personnel from raising or disclosing issues with regard to the true quality and quantity of emissions and the emissions software of its vehicles, or of Volkswagen's emissions scheme.
- 191. For the reasons laid out in paragraphs 186-188, all applicable statutes of limitation have been tolled by operation of the discovery rule with respect to claims for all Affected Vehicles identified herein.
- 192. All applicable statutes of limitation have also been tolled by Volkswagen's knowing and active fraudulent concealment and denial of the facts alleged herein throughout the time period relevant to this action.
- 193. Instead of disclosing its emissions scheme, or that the quality and quantity of emissions from the subject vehicles were far worse than represented, and of its disregard of federal

and state law, Volkswagen falsely represented that its vehicles complied with federal and state emissions standards, and that it was a reputable manufacturer whose representations could be trusted.

- Volkswagen is also estopped from relying on any statutes of limitations defense in 194. this action.
- 195. Volkswagen was under a continuous duty to disclose to DAM the true character, quality, and nature of emissions from the Affected Vehicles, and of those vehicles' emissions systems, and of the compliance of those systems with applicable federal and state law.
- 196. Volkswagen knowingly, affirmatively, and actively concealed the true nature, quality, and character of the emissions systems, and the emissions of the Affected Vehicles.
- 197. Volkswagen was also under a continuous duty to disclose to DAM that it had engaged in the scheme complained of herein to evade federal and state emissions and clean air standards, and that it systematically devalued compliance with and deliberately flouted, federal and state laws regulating vehicles emissions and clean air.

COUNT I – VIOLATIONS OF RACKETEER INFLUENCED AND CORRUPT ORGANIZATIONS ACT (RICO)

- 198. Plaintiff DAM realleges and incorporates paragraphs 1 through 197 as if fully set forth herein.
- 199. DAM brings this Count against Defendants, Robert Bosch GmbH, Inc. and Robert Bosch LLC, and Coconspirators, Volkswagen AG and Volkswagen Group of America, Inc.⁷³ (collectively, "RICO Defendants").

25

23

24

26

27

28

73 Plaintiff again includes VWAG and VW Group solely to provide context and sufficient allegations against their coconspirators, Bosch LLC and Bosch GmbH. Plaintiff has voluntarily dismissed its claims against VWAG and VW Group and their inclusion herein, including being labelled for ease of reference as "RICO Defendants," is not intended to displace that dismissal.

16

17

18

22

25

27

26

28

200. The RICO Defendants are all "persons" under 18 U.S.C. § 1961(3) because they are capable of holding, and do hold, a "legal or beneficial interest in property."

- 201. Section 1962(c) makes it "unlawful for any person employed by or associated with any enterprise engaged in, or the activities of which affect, interstate or foreign commerce, to conduct or participate, directly or indirectly, in the conduct of such enterprise's affairs through a pattern of racketeering activity." Section 1962(d), in turn, makes it unlawful for "any person to conspire to violate" any of the RICO provisions.
- 202. For many years, the RICO Defendants have aggressively sought to increase the sales of Affected Vehicles in an effort to bolster revenue, augment profits and increase Volkswagen's share of the diesel vehicle market. Finding it impossible to achieve their goals lawfully, however, the RICO Defendants resorted instead to orchestrating a fraudulent scheme and conspiracy. In particular, the RICO Defendants, along with other entities and individuals, created and/or participated in the affairs of an illegal enterprise ("Emissions Fraud Enterprise") whose direct purpose to deceive the regulators and the public into believing the Affected Vehicles were "clean" and "environmentally friendly." As explained in greater detail below, the RICO Defendants' acts in furtherance of the Emissions Fraud Enterprise violate §§ 1962(c) and (d).
- 203. Upon information and belief, the Emissions Fraud Enterprise consisted of the entities named as Defendants in this matter as well as those individuals specifically named below.
- 204. The Volkswagen Defendants include Volkswagen AG and Volkswagen Group of America. Although each Volkswagen Defendant is a distinct legal entity, VW Group is whollyowned⁷⁴ and controlled⁷⁵ by Volkswagen AG.

http://www.volkswagenag.com/content/vwcorp/info center/en/publications/2015/03/Y 2014 e.bi n.html/binarystorageitem/file/GB+2014 e.pdf.

⁷⁴ http://www.volkswagenag.com/content/vwcorp/info_center/en/publications/2015/03/ Shareholdings.bin.html/binarystorageitem/file/Anteilsbesitz+VW+AG+31.12.2014_englisch.pdf. 75 http://www.volkswagenag.com/content/vwcorp/content/en/brands_and_products.html;

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	

205.	As noted previously,	in 2007, the Volks	swagen Defendar	nts made it their	mission to
become the do	minant automotive r	manufacturing con	glomerate in the	e world. At the	time they
articulated this	goal, however, the V	olkswagen Defend	lants were strugg	ling to retain the	ir foothold
in the America	n market. Their str	rategy of wooing o	customers with p	premium produc	ts was not
paying off a	nd Volkswagen's	costly plant in	Chattanooga, T	ennessee was	"woefully
underutilized."	76				

206. In response to these obstacles, VWAG and its leader, Martin Winterkorn, set in motion an ambitious plan to triple the Volkswagen Defendants' sales in the United States. The linchpin of this strategy was increasing sales of "diesel-powered cars... [and] promising high mileage and low emissions without sacrificing performance."⁷⁷

207. Additionally, to achieve its lofty sales goal, the Volkswagen Defendants made a business-driven decision to move away from selective catalytic reduction ("SCR") emission control systems they had previously used in their vehicles and that were industry standard at the time. Instead, they sought to replace the SCR systems with the less expensive and easier to maintain lean NO_x trap ("LNT") systems.⁷⁸ Critically, however, the LNT technology the Volkswagen Defendants sought to implement had not been shown to effectively reduce toxic NO_X emissions to lawful levels under normal operating conditions.

22

25

26

⁷⁶ Anton Watts. VW Drama: Why Piech Wants Winterkorn Out-and What the Future May Hold. Car and Driver (Apr. 16, 2015).

⁷⁷ Danny Kim, Aaron Danny Hakim, Aaron Kessler, and Jack Ewing, "As Volkswagen Pushed to 23 Be No. 1, Ambitions Fueled a Scandal," New York Times (Sept. 26, 2015). 24

⁷⁸ The term "NOx trap" refers to any device whose purpose is to reduce the oxides of nitrogen. See https://en.wikipedia.org/wiki/NOx adsorber. However, the term here is used as a shorthand, informal reference to the emissions control system developed by the Volkswagen Defendants as an alternative to the SCR system. Unlike the NOx trap, SCR systems require vehicles to carry an onboard tank of an exhaust additive, often urea crystals in mineralized water that has to be refilled every 10,000 miles at a cost of around \$300. Additionally, SCR systems also increase the vehicles' initial purchase price.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

208. Accordingly, working with the other members of the Emissions Fraud Enterprise
the Volkswagen Defendants devised a scheme to circumvent the United States' stringent emission
standards by incorporating a "defeat device" into their LNT emissions control system and their late
TDI vehicles equipped with SCR emissions systems. The "defeat device" automatically increase
exhaust gas recirculations and activates emissions controls during testing conditions only.
Employing this technology, the Affected Vehicles routinely pass emissions tests even though i
normal operating conditions when the emissions treatment is de-rated or disabled they em
unlawful levels of toxic pollutants into the atmosphere. ⁸⁰

- 209. Making matters worse, in order to profit from the scheme and increase their sales according to plan, the Volkswagen Defendants with the active participation of the Bosch Defendants, unabashedly billed the Affected Vehicles as "clean" and "environmentally friendly" vehicles.⁸¹
- 210. In sum, as part of their effort to become the dominant automotive manufacturing conglomerate in the world, the Volkswagen Defendants controlled and directed an eight-year-long enterprise whose purpose was to deceive regulators, existing and potential franchise motor vehicles, like DAM, and the public through lies and deception.
- 211. Upon information and belief, the Volkswagen Defendants' leaders including Martin Winterkorn, Ulrich Hackenberg, Frank Tuch, and Wolfgang Hatz played central roles in the Emissions Fraud Enterprise's unlawful scheme.

22

21

24

25

26

27

⁷⁹ Testimony of Michael Horn, President and CEO of Volkswagen Group of America, Inc. Before H. Comm. on Energy and Commerce, 114th Cong. (2015).

⁸⁰ *Id*.

⁸¹ See Jad Mouawad & Sydney Ember. VW's Pitch to Americans Relied on Fun and Fantasy. New York Times (Sept. 27, 2015), http://nytimes.com/2015/09/28/business/media/vws-pitch-to-americans-relied-on-fun-and-fantasy.html?ref=business.

16

18

20

22 23

24

25

26

27 28

212. Winterkorn took the helm of Volkswagen AG in 2007 and was the chief architect of the Volkswagen Defendants' strategy to triple sales in the American market by relying more heavily on their purportedly revolutionary "clean" diesel offerings. 82

- 213. Still, Winterkorn quickly realized his strategy could not succeed if the Volkswagen Defendants relied on the SCR technology they had used in their pre-2009 diesel vehicles and that all their competitors used on more expensive diesel offerings. Winterkorn instead advocated an alternative course of action that enabled the Volkswagen Defendants to cut costs and offer the public lower-priced diesel vehicles. To that end, he appointed Ulrich Hackenberg and Wolfgang Hatz, two former Audi engineers and members of the Emissions Fraud Enterprise, to lead the research and development facet of the "clean" diesel project.
- 214. Despite Hackenberg and Hatz' best efforts, the technological hurdles were too formidable and a viable, lawful LNT-based system could not be found. Although Winterkorn was routinely apprised of these obvious technical setbacks, he continued to pursue the aggressive costcutting, profit drive plan he had originally envisioned. In doing so, he directly participated in the scheme to defraud regulators and consumers.
- 215. On February 1, 2007, Hackenberg was appointed to Volkswagen's Brand Board of Development. In this capacity, he was responsible for the technical development of all the Volkswagen Defendants' brands.83
- 216. On July 1, 2013, Hackenberg was appointed to the Board of Management of Audi AG and made responsible for its Technical Development department. In this capacity, Hackenberg

⁸² Volkswagen AG, TDI: U.S. Market Success, Clean Diesel Delivers (March, 2015), http://cleandieseldelivers.com/media/Douglas-Skorupski-VGoA_DTF_March2015.pdf.

⁸³ https://www.audiusa.com/newsroom/corporate/audi-ag-board-ofmanagement/ulrichhackenberg.

spearheaded the development of Audi's TDI "Clean Diesel" engines. As he explained in a press release, his strategy for Audi's technical development included the following:

[P]ushing forward with development in ... our TDI engines in the USA – our clean diesel offensive is bearing fruit. In China, too, we are already introducing the first clean diesel models and watching developments there very closely. We also expect a great deal from g-tron technology, the most sustainable type of gas drive.^[84]

- 217. Hackenberg's statement is illustrative of the Volkswagen Defendants' efforts to falsely bill Affected Vehicles as "clean," "environmentally friendly," and "fuel efficient" when the opposite was true.
- In 2010, Tuch was appointed head of quality control across several of the Volkswagen Defendants' brands. Winterkorn hoped Tuch would move Volkswagen "forward in the USA." Volkswagen's in-house magazine reported that Tuch and Winterkorn worked closely to honor that pledge, meeting "every Monday to discuss quality issues, often taking test drives in vehicles manufactured by the company." In his role as head of quality assurance, Tuch was also intimately familiar with Volkswagen, Audi, and Porsche engines and transmissions. Among his duties was "the development and production of components such as engines, transmissions, seats and suspension parts" for small, compact, midsize, and full-size product lines, including all the Affected Vehicles. ⁸⁶
- 219. Significantly, Tuch also oversaw "36 laboratory locations throughout the world in terms of training and auditing and also finds staff to fill laboratory manager positions," including

^{25 84 &}quot;Gentlemen Start Your Engines," http://audi-encounter.com/magazine/ technology/01-2015/126-gentlemen-start-your-engines (2014).

^{26 85} http://www.marketwatch.com/story/volkswagen-suspends-quality-control-chief-2015-10-

⁸⁶ Jack Ewing. "Volkswagen Suspends 5th Executive in Emissions Scandal," The New York Times (Oct. 20, 2015).

13

15

20

23

24

25 26

27

28

⁸⁷ http://www.volkswagen-larriere.de/en/what_we_do/corporate_divisions/ quality assurance.html.

88 http://www.bosch-presse.de/presseforum/details.htm?txtID=7421&tk_id=108.

the Volkswagen Defendants' laboratories in the United States, which were primarily responsible for emissions testing of the Affected Vehicles.⁸⁷

- 220. On information and belief, Tuch knew the Affected Vehicles used defeat devices to evade federal and state vehicle emissions standards.
- 221. Hatz directed engine development for the Porsche, Audi and Volkswagen brands. In this role he supervised the development of the engines and transmissions for Affected Vehicles and had knowledge of their technical details. On information and belief, Hatz knew the Affected Vehicles used defeat devices to evade federal and state vehicle emissions standards.
- 222. James Robert Liang is a Volkswagen engineer who pled guilty on September 9, 2016, to one count of conspiracy to commit wire fraud and to violate the Clean Air Act. In connection with pleading guilty, Liang admitted that he helped his co-conspirators continue to lie to the EPA, CARB and Volkswagen customers even after the regulatory agencies started raising questions about the vehicles' on-road performance following an independent study commissioned by the International Council on Clean Transportation or the WVU Study, which showed that the diesel vehicles' emissions on the road were up to 40 times higher than shown on the dynamometer.
- 223. The Bosch Defendants are Bosch LLC and Bosch GmbH. Employees at Bosch LLC and Bosch GmbH who worked in the cross-entity Bosch Diesel Systems group tested, manufactured and sold the electronic control module ("ECM") that managed the emissions control system used by the Volkswagen Defendants in the Affected Vehicles. This particular ECM is more formally referred to as the Electronic Diesel Control Unit 17 ("EDC17"). 88
- 224. Defendant Bosch GmbH is a multinational engineering and electronics company headquartered in Gerlingen, Germany, which has hundreds of subsidiaries and companies. It

12

18 19

20

17

21 22 23

25 26

24

27

28

wholly owns Defendant Bosch LLC, a Delaware limited liability company headquartered in Farmington Hills, Michigan. As explained above, Bosch's sectors and divisions are grouped by subject matter, not location. The Mobility Solutions (formerly Automotive Technology) is the Bosch sector at issue, particularly its Diesel Services group, and it encompasses employees of Bosch GmbH and Bosch LLC. These individuals were responsible for the design, manufacture, development, customization, and supply of the defeat device to Volkswagen for use in the Affected Vehicles. In addition, employees of Bosch LLC were actively involved in promoting fraudulent "clean diesel" technology, lobbying politicians, and communicating with state and federal regulators.

225. Volkmar Denner has been Chairman and CEO of Bosch since July 2012, after decades of working Bosch's Engine ECU Development division, managing the development and sale of automotive engine computers, such as the EDC units that Volkswagen and Bosch GmbH modified to service as defeat devices. Denner fostered Bosch's relationship with key corporate partners, such as Volkswagen, which brought in billions of dollars in annual revenue for Bosch GmbH. Denner communicated directly with Winterkorn about products sold to Volkswagen. In 2014, Denner met in person with Winterkorn at VWAG headquarters to discuss, among other topics, the "akustikfunktion" in diesel engines.

226. Engineers and other employees at Bosch GmbH and Bosch LLC worked with Volkswagen to develop and implement a specific and unique set of software algorithms to surreptitiously evade emissions regulations. Bosch GmbH customized their EDC17s for installation in the Affected Vehicles with unique software code to detect when vehicles were undergoing emissions testing, as described above.⁸⁹

⁸⁹ http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software.

227. Bosch GmbH and Bosch LLC were well aware that the EDC17 would be used by Volkswagen to cheat on emissions testing. For example, on June 2, 2008, an employee at Bosch GmbH even requested indemnification from Volkswagen for the "expanded use" of the EDC17s which it called a "defeat device." The letter explained that "[t]he usage of a defeat device is prohibited pursuant to...US law (CARB/EPA)," and warned that the agreed-to software modifications would allow "the certified dataset [to be] replaced with another, possibly non-certified data set," which could "the vehicle's general operating license (registration) [to] become void." Volkswagen refused, but Bosch GmbH continued shipping the modified software to Volkswagen for use in the Affected Vehicles for another seven years.

228. Bosch GmbH and Bosch LLC were also critical to the concealment of the defeat device in communications with U.S. regulators and went even further to actively lobby U.S. lawmakers on behalf of Volkswagen and its "Clean Diesel" vehicles. This included Bosch, LLC, acting in concert with and under the direction of Bosch GmbH, joining Volkswagen in the efforts to change the perception of diesel in the United States. As early as 2005, Bosch Diesel Systems (a division of Bosch Group that contained employees of both Bosch LLC and Bosch GmbH) worked with a public relations firm to "target NGOs and regulators in California on behalf of Bosch…"⁹³

The emissions systems in the Affected Vehicles could not effectively lower NO_X emissions to legal levels during normal operating conditions. In order to pass the emissions test, then, the EDC17 equipped with a "defeat device," which is software that allows the vehicle to determine whether it is being operated under normal conditions or testing conditions. Under normal operating conditions, the software downgrades exhaust gas recirculations and shuts off the LNT or

⁹⁰ VW-MDL2672-02570091 (English translation).

⁹¹ *Id.* at -92.

⁹² *Id.* at -93.

⁹³ VW-MDL2672 – 1529.

SCR after-treatment system thereby allowing the vehicle to perform with high power and efficiency, but also allowing many times more toxic pollutants than is allowable under law. By contrast, under testing conditions, the software increases exhaust gas recirculation and turns on the LNT or SCR after-treatment system, which reduces the NO_X emissions enough to pass the emissions test, but negatively impacts the vehicle's gas mileage and performance.⁹⁴

- 230. As was publicly reported, Bosch GmbH, seeking to shield itself for its and Bosch LLC's involvement in the unlawful Emissions Fraud Enterprise, sent a letter to Volkswagen AG in 2007 stating that the Affected Vehicles could not be lawfully operated if the LNT or SCR after-treatment system was disabled.⁹⁵
- Notwithstanding their knowledge that the Affected Vehicles could not be lawfully operated if the emissions system was disabled, the Bosch Defendants, driven to cement their position as a leading supplier of diesel emissions equipment, went on to sell approximately eleven million EDC17s to the Volkswagen Defendants over an eight-year period.⁹⁶
- 232. Bosch GmbH's decision to continue the sale of EDC17s to the Volkswagen Defendants for years on end is remarkable considering that:
- a. Upon information and belief, the Bosch Defendants knew the "defeat device" was not necessary for any legitimate purpose.
- b. None of the varied emissions control systems the Bosch Defendants tested, manufactured, and sold to other diesel vehicle manufacturers relied on the same technology the Volkswagen Defendants were utilizing. Indeed, the Volkswagen Defendants' competitors continued exclusively using the more expensive SCR technology.⁹⁷

 $^{^{94}\} http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software.$

 $^{^{95}\} http://jalopnik.com/feds-are-now-investigating-volkswagen-supplier-bosch-ov-1743624448.$

⁹⁶ http://blog.caranddriver.com/epa-investigating-bosch-over-vw-diesel-cheater-software.

⁹⁷ http://www.nytimes.com/2015/09/27/business/as-vw-pushed-to-be-no-1-ambitions-fueled-ascandal.html?_r=0.

c. Even for SCR systems in Volkswagen's Gen2 and Gen3 SCR-equipped engine
systems, the amount of exhaust fluid the system used and was able to store was too low for normal
driving conditions, suggesting that the quality was calculated to meet just the testing time and not
meant to be engaged during normal usage.

- 233. Absent an extraordinary engineering breakthrough for which there was no external evidence the programming of the EDC17 presented a practical impossibility. Bosch Diesel Systems, including employees at Bosch GmbH and Bosch LLC, as highly sophisticated actors in the engine control space must have known that the Volkswagen Defendants had not actually engineered revolutionary emissions control systems that enabled the Affected Vehicles to maintain performance, fuel efficiency, reduce emissions and reduce costs. 98
- 234. IAV engineers were part of the enterprise that developed the emissions systems that contained a defeat device. In the plea agreement of Volkswagen engineer Robert Liang, IAV is identified as "Company A" that aided and abetted Liang and other co-conspirators.
- 235. On June 1, 2016, an indictment was filed in the United States District Court, Eastern District of Michigan, in *United States of America v. James Robert Liang*. The indictment arises from Liang's role in VW's violations of the Clean Air Act and wire fraud and alleges that he and others at VW and elsewhere engaged in a conspiracy:

The purpose of the conspiracy was for LIANG and his co-conspirators to unlawfully enrich VW and themselves by, among things, (a) deceiving U.S. regulators in order to obtain the necessary certificates to sell diesel vehicles in the United States; (b) selling VW diesel vehicles to U.S. customers knowing that those vehicles did not meet U.S. emissions standards; (c) deceiving U.S. customers by marking VW diesel motor vehicles as "clean diesel" knowing that those vehicles emitted NO_X at levels

⁹⁸ Upon information and belief, sophisticated entities like the Bosch Defendants were also likely aware that Wolfgang Bernhard, a former high-level executive with Mercedes-Benz with a reputation for implementing cost-cutting measures, had been removed from the "clean diesel" project at Volkswagen AG shortly before the Volkswagen Defendants abandoned the SCR systems and inexplicably developed what was purportedly an even cheaper technology. *See*, http://www.foxbusiness.com/features/2015/10/05/vw-emissions-probe-zeroes-in-on-two-engineers.html.

well above U.S. standards; and (d) concealing the defeat device from U.S. regulators, VW customers, and the U.S. public.

236. On September 9, 2016, Liang entered into a Plea Agreement for one count of wire fraud. The factual basis of the plea supports the plausibility of the RICO claim set forth below and states in pertinent part:

The following facts are a sufficient and accurate basis for defendant's guilty plea:

From 1983 to May 2009, defendant JAMES ROBERT LIANG was an employee of Volkswagen AG ("VW AG"), working in VW AG's diesel development department in Wolfsburg, Germany.

In about 2006, LIANG and his co-conspirators began to design a new "EA 189" diesel engine. They soon realized, however, that the engine could not meet both customer expectations as well as new, stricter U.S. emissions standards. As a result, LIANG and his co-conspirators pursued and planned the use of a software function to cheat standard U.S. emissions tests (the "defeat device"). LIANG used the defeat device software while working on the EA 189 and assisted in making the defeat device software work. The co-conspirators needed to do so to obtain a certificate of conformity from the United States Environmental Protection Agency ("EPA") in order to sell vehicles in the United States. LIANG understood that EPA would not certify vehicles in the United States if EPA knew that the vehicles contained a defeat device.

In or around 2008, LIANG worked with his co-conspirators to calibrate and refine the defeat device. This defeat device recognized whether the affected VW diesel vehicles were undergoing standard U.S. emissions testing on a dynamometer or being driven on the road under normal driving conditions. The defeat device accomplished this by recognizing the standard drive cycles used in EPA's emissions tests. If the vehicle's software detected that it was being tested, the vehicle performed in one mode, which satisfied U.S. emissions standards for nitrogen oxide ("NOx"). If the defeat device detected that the vehicle was not being tested, it operated in a different mode, in which the vehicle's emissions control systems were reduced substantially, causing the vehicle to emit substantially higher amounts of NO_X, sometimes forty times higher than U.S. standards.

LIANG moved to the United States in May 2008 to assist in the launch of VW's diesel vehicles with EA 189 engines. From about May 2008 to the present, LIANG was the Leader of Diesel Competence for VW Group of America ("VW GOA"), a VW subsidiary. In that role, LIANG assisted in certification, testing, and warranty issues for VW diesel vehicles in the United States.

For each new model year of VW's diesel vehicles, VW employees met with EPA to seek the certifications required to sell the vehicles to U.S. customers. During one of these meetings, which LIANG attended personally in Ann Arbor, Michigan with

EPA on March 19, 2007 and on March 21, 2007 with California Air Resources Board ("CARB"), LIANG participated as his co-conspirators described VW's diesel technology and emissions control systems in detail to the staffs of the EPA and CARB but intentionally omitted LAING and his co-conspirators' plan to include a defeat device in VW diesel vehicles. LIANG knew that VW was cheating by implementing the defeat device and that he and his co-conspirators were deceiving EPA in this meeting.

As part of the certification process for each new model year, including model years 2009 through 2016, LIANG knew his co-conspirators continued to falsely and fraudulently certify to EPA and CARB that VW diesel vehicles met U.S. emissions standards and complied with the Clean Air Act. During this time, LIANG and his co-conspirators knew that VW marketed VW diesel vehicles to the U.S. public as "clean diesel" and environmentally-friendly, and promoted the increased fuel economy. LIANG and his co-conspirators knew that these representations made to U.S. customers were false, and that VW's diesel vehicles were not clean.

As VW's "clean diesel" vehicles in the United States began to age, they experienced higher rates of warranty claims for parts and components related to emissions control systems. Some of LIANG's coconspirators believed that the increased claims were a result of the vehicle in testing mode too long, rather than switching to "road mode." Because of these increased claims, LIANG worked with his coconspirators to enhance the defeat device to allow the vehicle to more easily recognize when the vehicle was no longer in testing mode. LIANG knew that his co-conspirators falsely and fraudulently told U.S. customers and others that a software update in about 2014 was intended to improve the vehicles when, in fact, LIANG and his co-conspirators knew that part of the update was intended to improve the defeat device's precision in order to reduce the stress on the emissions control systems.

In the spring of 2014, a non-government organization published the results of a study which identified substantial discrepancies in the NO_X emissions from certain VW vehicles when tested on the road compared to when these vehicles were undergoing EPA standard drive cycle tests on a dynamometer. Following the study, CARB, in coordination with the EPA, attempted to work with VW to determine the cause for the higher NO_X emissions in VW diesel vehicles on the road as opposed to the dynamometer. LIANG and his co-conspirators discussed how they could answer the regulatory agencies' questions without revealing the defeat device. LIANG knew that, after these discussions, his co-conspirators intentionally made fraudulent explanations to the EPA and CARB when providing testing results, data, presentations, and statements to the EPA and CARB by failing to disclose the fact that the primary reason for the discrepancy was the defeat device.

LIANG knew that his co-conspirators also falsely and fraudulently told U.S. customers, EPA, and CARB that voluntary recall in or around early 2015 was intended to "fix" the issues that were causing the discrepancy, when, in fact, LIANG and his co-conspirators knew that although the update lowered the NO_X emissions in certain VW diesel vehicles on the road, the update did not remove the defeat

device software that was the true reason for the discrepancy.

LIANG and his co-conspirators caused defeat device software to be installed in all of the approximately 500,000 VW diesel 2.0 liter light-duty passenger vehicles sold in the United States from 2009 through 2015.

- On January 11, 2017, Volkswagen AG plead guilty to federal conspiracy, fraud and false statements in connection with its role in the criminal enterprise. The 30-page Statement of Facts admits and describes Volkswagen's and IAV's, another independent engineering firm, roles in the emissions fraud and is attached as **Exhibit D** and incorporated herein.
- 238. The foregoing facts provide an additional plausible basis supporting the allegations of a conspiracy and the existence of a RICO enterprise.
- 239. The persons and entities described in the preceding paragraphs 249 through 284 are members of and constitute an "association-in-fact" enterprise.
- 240. The Emissions Fraud Enterprise began as early as 2005, when an internal feasibility study at VWAG identified Bosch's EDC17 as a solution to their engineering dilemma by reducing vehicle emissions of nitrogen oxides ("NO_x") through a change in engine electronics. Starting in mid-2005, Volkswagen and Bosch GmbH entered into a series of agreements to develop what ultimately became the defeat device for the Affected Vehicles. The Emissions Fraud Enterprise continued without interruption for approximately the next ten years, as the Volkswagen Defendants continued to install Bosch EDC17s in the Affected Vehicles that employed defeat devices and Bosch GmbH continued to work with Volkswagen to modify the EDC17 programming for new models while Bosch LLC continued to promote diesel technology and coordinate the ongoing deception of state and federal regulators. The Emissions Fraud Enterprise was first publicly disclosed in approximately September of 2015 when Volkswagen finally admitted the fraudulent scheme to U.S. regulators who exposed the RICO Defendants to the public. The Emissions Fraud Enterprise ceased shortly after the September 18, 2015, and November 2, 2015, NOVs, when the

15

18

22

23 24

25

26

27

28

Volkswagen Defendants issued stop sale orders to all existing franchised dealers to cease selling or leasing the Affected Vehicles.

- 241. At all relevant times, the Emissions Fraud Enterprise: (a) had an existence separate and distinct from each RICO Defendant; (b) was separate and distinct from the pattern of racketeering in which the RICO Defendants engaged; and (c) was an ongoing organization consisting of legal entities, including the Volkswagen Defendants, the Bosch Defendants, and other entities and individuals associated for the common purpose of designing, manufacturing, distributing, testing, and selling the Affected Vehicles through fraudulent COCs and EOs, false emissions tests, deceptive and misleading marketing and materials, and deriving profits and revenues from those activities. Each member of the Emissions Fraud Enterprise shared in the bounty generated by the enterprise, i.e., by sharing the benefit derived from increased sales revenue generated by the scheme to defraud consumers and existing and prospective franchise dealers alike nationwide. 99
- 242. The Emissions Fraud Enterprise functioned by selling vehicles and component parts to the consuming public. Many of these products are legitimate, including vehicles that do not contain defeat devices. However, the RICO Defendants and their co-conspirators, through their illegal Enterprise, engaged in a pattern of racketeering activity, which involves a fraudulent scheme to increase revenue for the RICO Defendants and the other entities and individuals associated-infact with the Enterprise's activities through the illegal scheme to sell the Affected Vehicles.
- 243. The Emissions Fraud Enterprise engaged in, and its activities affected interstate and foreign commerce, because it involved commercial activities across state boundaries, such as the marketing, promotion, advertisement and sale or lease of the Affected Vehicles throughout the

⁹⁹ Volkswagen sold more Affected Vehicles by utilizing an emissions control system that was cheaper than SCRs, all the while charging consumers a premium for purportedly "clean," "environmentally friendly," and "fuel efficient" vehicles. Bosch, in turn, sold more EDC Units because the Volkswagen Defendants manufactured and sold more Affected Vehicles.

25 26

27

28

country, and the receipt of monies from the sale of the same. The significant sales of these Affected Vehicles also enticed DAM to expend substantial funds in an effort open a new VW-brand dealership in Ohio and artificially inflated the actual value of the Westerville LOI, for which it had negotiated with Volkswagen under a prior agreement to receive.

- 244. Within the Emissions Fraud Enterprise, there was a common communication network by which co-conspirators shared information on a regular basis. The Emissions Fraud Enterprise used this common communication network for the purpose of manufacturing, marketing, testing and selling the Affected Vehicles to the general public nationwide.
- 245. Each participant in the Emissions Fraud Enterprise had a systematic linkage to each other through corporate ties, contractual relationships, financial ties, and continuing coordination of activities. Through the Emissions Fraud Enterprise, the RICO Defendants functioned as a continuing unit with the purpose of furthering the illegal scheme and their common purposes of increasing their revenue and market share, and minimizing losses.
- 246. The RICO Defendants participated in the operation and management of the Emissions Fraud Enterprise by directing its affairs, as described herein. While the RICO Defendants participated in, and are members of, the Enterprise, they have a separate existence from the Enterprise, including distinct legal statuses, different offices and roles, bank accounts, officers, directors, employees, individual personhood, reporting requirements, and financial statements.
- 247. The Volkswagen RICO Defendants exerted substantial control and participated in the affairs of the Emissions Fraud Enterprise by:
 - making the decision to transition to the design of their diesel vehicles away from an effective SCR emissions control system and adopt instead the ineffective LNT emissions system, controlled by the Bosch-supplied EDC Unit 17;
 - b. designing the Affected Vehicles with defeat devices;

- c. continuing to employ defeat device programming in later SCR-based vehicles in order to offer more powerful and fuel efficient vehicles to increase sales and profit margins;
- d. failing to correct or disable the defeat devices when warned;
- e. manufacturing, distributing, and selling the Affected Vehicles that emitted greater pollution than allowable under applicable regulations;
- f. misrepresenting or omitting (or causing such misrepresentations and omissions to be made) vehicle specifications on COC and EO applications;
- g. introducing the Affected Vehicles into the stream of U.S. commerce without a valid EPA COC and/or CARB EO;
- h. concealing the existence of the defeat devices and the unlawfully high emissions from regulators, existing and prospective franchised dealers, and the public;
- persisting in the manufacturing, distribution, and sale of the Affected Vehicles even after questions were raised about the emissions testing and discrepancies concerning the same;
- j. misleading government regulators as to the nature of the defeat devices and the defects in the Affected Vehicles;
- k. misleading the driving public as to the nature of the defeat devices and the defects in the Affected Vehicles;
- designing and distributing marketing materials that misrepresented and concealed the defect in the Affected Vehicles;
- m. otherwise misrepresenting or concealing the defective nature of the Affected Vehicles from the public, regulators, and existing and prospective franchise dealers;

n. illegally selling and/or distributing the Affected Vehicles; collecting revenues and profits from the sale of such products; and ensuring that the other RICO Defendants and unnamed co-conspirators complied with the fraudulent scheme.

The Bosch Defendants also participated in, operated and/or directed the Emissions Fraud Enterprise. Bosch GmbH participated in the fraudulent scheme by manufacturing, installing, testing, modifying, and supplying the EDC17 which operated as a "defeat device" in the Affected Vehicles. Bosch GmbH exercised tight control over the coding and other aspects of the defeat device software and was closely collaborated with Volkswagen to develop, customize, and calibrate the defeat devices. Additionally, Bosch GmbH and Bosch LLC continuously cooperated with the Volkswagen Defendants to ensure that the EDC17 was fully integrated into the Affected Vehicles. Bosch LLC and Bosch GmbH also participated in the affairs of the Enterprise by concealing the defeat devices on U.S. documentation and in communications with U.S. regulators. Finally, Bosch LLC actively lobbied lawmakers in the U.S. on Volkswagen's behalf. Bosch GmbH collected tens of millions of dollars in revenues and profits from the hidden defeat devices in the Affected Vehicles.

249. Without the RICO Defendants' willing participation, including Bosch GmbH's active involvement in developing and supplying the critical defeat devices for the Affected Vehicles and Bosch LLC's active promotion of diesel technology and concealment of the defrauding of regulators, the Emissions Fraud Enterprise's scheme and common course of conduct would not have been successful.

250. The RICO Defendants directed and controlled the ongoing organization necessary to implement the scheme at meetings and through communications of which DAM cannot fully know at present, because such information lies in the Defendants' and others' hands.

251. The members of the Emissions Fraud Enterprise all served a common purpose; namely, to outsell their law-abiding competitors and increase their revenues through the sale of as many Affected Vehicles as possible thereby artificially increasing the value of the VW-brand and its existing and prospective franchise dealerships. Each member of the Emissions Fraud Enterprise shared the bounty generated by the enterprise, *i.e.*, by sharing the benefit derived from increased sales revenue generated by the scheme to defraud. The Volkswagen Defendants sold more Affected Vehicles by utilizing an emissions control system that was cheaper to install and allowed for generous performance and efficiency tuning, all the while charging consumers a premium for purportedly "clean," "environmentally friendly," and "fuel efficient" Affected Vehicles. Bosch GmbH, in turn, sold more EDC Units because the Volkswagen Defendants manufactured and sold more Affected Vehicles. The RICO Defendants achieved their common purpose by repeatedly misrepresenting and concealing the nature of the Affected Vehicles and the ability of the emissions control systems to effectively reduce toxic emissions during normal operating conditions.

- 252. To carry out, or attempt to carry out the scheme to defraud, the RICO Defendants conducted or participated in the conduct of the affairs of the Emissions Fraud Enterprise through a pattern of racketeering activity that employed the use of the mail and wire facilities, in violation of 18 U.S.C. § 1341 (mail fraud) and § 1343 (wire fraud).
- 253. Specifically, the RICO Defendants participated in the scheme to defraud by using mail, telephone, and the Internet to transmit writings travelling in interstate or foreign commerce.
- 254. The RICO Defendants' use of the mails and wires include, but are not limited to, the transmission, delivery, or shipment of the following by the RICO Defendants or third parties that were foreseeably caused to be sent as a result of Defendants' illegal scheme:

1	a.	application for certificates submitted to the EPA and CARB and Approved
2		Applications received in the mail on April 9, 2008, June 23, 2008, June 6, 2008, and
3		July 2, 2000.
4	b.	applications submitted to the EPA and CARB for each model year as follows:
5		i. Model Year ("MY") 2009-2015 VW Jetta;
6		ii. MY 2009-2014 VW Jetta Sportwagen;
7		iii. MY 2010-2015 VW Golf;
8		iv. MY 205 VW Golf Sportwagen;
9		v. MY 2013-2015 VW Beetle and VW Beetle Convertible; and
10 11		vi. MY 2012-2015 VW Passat.
12	C	the Affected Vehicles themselves;
13		component parts for the defeat devices;
14		
15	e.	falsified emissions tests;
16	f.	fraudulently-obtained EPA COCs and CARB EOs;
17	g.	vehicle registrations and plates as a result of the fraudulently-obtained EPA COCs
18		and CARB EOs;
19	h.	documents and communications that facilitated the falsified emissions tests;
20	i.	false or misleading communications intended to lull the public and regulators from
21		discovering the defeat devices and/or other auxiliary devices;
22	j.	sales and marketing materials, including advertising, websites, product packaging,
23	v	brochures, and labeling, which misrepresented and concealed the true nature of the
24		
25	_	Affected Vehicles;
26	k.	documents intended to facilitate the manufacture and sale of the Affected Vehicles,
27		including hills of lading invoices shipping records reports and correspondence:

- documents to process and receive payment for the Affected Vehicles by unsuspecting franchise dealers, including invoices and receipts;
- m. payments to Bosch GmbH;
- n. deposits of proceeds;
- o. and other documents and things, including electronic communications.
- 255. The RICO Defendants (or their agents), for the purpose of executing the illegal scheme, sent and/or received (or caused to be sent and/or received) by mail or by private or interstate carrier, shipments of the Affected Vehicles and related documents by mail or a private carrier affecting interstate commerce, including the items described above and alleged below:

From	To	<u>Date</u>	<u>Description</u>
Bosch LLC	VW America	December 2009	Documents and communications related to Volkswagen "Clean Diesel" Partnership, 2009 Review and 2010 Opportunities, Bosch Diesel Systems North America Marketing.
Bosch LLC	CARB	September 2009	Documents and communications related to Diesel Tech Day in El Monte, CA.
VW America Manufacturing Plant	South Bay VW	October 2011	Shipment of Volkswagen Jetta TDI Affected Vehicles.
Washington State Department of Licensing	Dan Clements	October 2011	Mailed registration card for 2012 Volkswagen Touareg TDI based on false emission test due to concealed defeat device.
CARB	VW America	July 2014	Mailed EO for 2015 Affected Vehicles based on fraudulent application.
California Department of Motor Vehicles	Phillip Clark	December 2014	Mailed registration card for 2014 Volkswagen Touareg TDI based on false emissions test due to concealed defeat device.
California Department of Motor Vehicles	Caroline Hoag	December 2014	Mailed renewed registration for 2011 Jetta SportWagen TDI based on false emission test due to concealed defeat device.
Washington State Department of	Dan Clements	February 2015	Mailed registration certificate for 2012 Volkwasgen Touareg TDI

Licensing	based on false emission test due to concealed defeat device.
-----------	--

256. The RICO Defendants (or their agents), for the purpose of executing the illegal scheme, transmitted (or caused to be transmitted) in interstate commerce by means of wire communications, certain writings, signs, signals and sounds, including those items described above and alleged below:

<u>From</u>	<u>To</u>	<u>Date</u>	<u>Description</u>			
Pignataro Volkswagen, Washington	American Express, North Carolina	April 2012	Credit card transaction in the amount of \$5,000 for down payment on 2012 VW Touareg by Dan Clements.			
CARB, California	VW America, Virginia	May 2014	Email communications concerning the WVU study.			
VW America, Michigan	EPA, Michigan; CARB, California	May 2012	Misleading application(s) for COC and EO for 2013 Passat TDI.			
Bosch America, Farmington Hills, Michigan	Volkswagen, Virginia	January 2013	Email communications regarding Bosch's promotion of VW Passat TDI through trip from Atlanta to Washington D.C.			
VW America, Virginia	CARB, California	October 2014	Misleading communications about discrepancies identified in the WVU study.			
Audi of Lynnbrook, New York	American Express, North Carolina	December 2014	Credit card transaction in the amount of \$2,586.45 for down payment on lease of 2015 Audi A3 by Kevin and Elizabeth Bedard.			
VW America, Virginia	EPA, District of Columbia	December 2014	Misleading communications about software patch for the Affected Vehicles without revealing fact of the defeat device.			
Bosch LLC, Michigan	CARB, California	January 2015	Email communications re: meeting with CARB. 100			
VW America, Michigan	Audi AG, Germany	February 2015	Email communication concerning meeting with Bosch			

¹⁰⁰ VW-MDL2672-02461438.

1	and CARB re: fault codes. 101									
2										
3	257. The RICO Defendants utilized the interstate and international mail and wires for the									
4	purpose of obtaining money or property by means of the omissions, false pretense, and									
5	misrepresentations described herein.									
6	258. The RICO Defendants also used the internet and other electronic facilities to carry									
7	out the scheme and conceal the ongoing fraudulent activities. Specifically, VW Group, under the									
8	direction and control of Volkswagen AG and its executives, made misrepresentations about the									
9	Affected Vehicles on their websites, YouTube, and through ads online, all of which were intended									
10	to mislead regulators and the public about the fuel efficiency, emissions standards, and other									
11 12	performance metrics.									
13	259. The RICO Defendants also communicated by U.S. mail, by interstate facsimile, and									
14	interstate electronic mail with various other affiliates, regional offices, divisions, dealerships and									
15	other third-party entities in furtherance of the scheme.									
16	260. The mail and wire transmissions described herein were made in furtherance of									
17	Defendants' scheme and common course of conduct to deceive regulators and consumers and lure									
18	consumers into purchasing the Affected Vehicles, which Defendants knew or recklessly									
19	disregarded as emitting illegal amounts of pollution, despite their advertising campaign that									
20	Affected Vehicles were "clean" diesel cars. The mail and wire transmissions also allowed									
21 22	Volkswagen to continue to demand outsized investments in new franchise dealerships and									
23	artificially inflated the value the VW brand and VW franchise dealerships because they maintained									
24										
25	the appearance of significant demand for the Affected Vehicles that were presumably in compliance									
26	with U.S. law.									
27										
28	¹⁰¹ VW-MDL2672-00902633.									

- 261. Many of the precise dates of the fraudulent use of the U.S. mail and interstate wire facilities have been deliberately hidden, and cannot be alleged without access to Defendants' books and records. However, DAM has described the types of, and in some instances, occasions on the predicate acts of mail and/or wire fraud occurred. They include thousands of communications and perpetuate and maintain the scheme, including the things and documents described in the preceding paragraphs.
- The RICO Defendants have not undertaken the practices described herein in isolation, but as part of a common scheme and conspiracy. In violation of 18 U.S.C. § 1962(d), the RICO Defendants conspired to violate 18 U.S.C. § 1962(c), as described herein. Various other persons, firms and corporations, including third-party entities and individuals not named as defendants in this Complaint, have participated as co-conspirators with the RICO Defendants in these offenses and have performed acts in furtherance of the conspiracy to increase or maintain revenues, increase market share, and/or minimize losses for the Defendants and their unnamed co-conspirators throughout the illegal scheme and common course of conduct.
- 263. The RICO Defendants aided and abetted others in violations of the above laws, thereby rendering them indictable as principals in the 18 U.S.C. §§ 1341 and 1343 offenses.
- 264. To achieve their common goals, the RICO Defendants hid from the general public the unlawfulness and emission dangers of the Affected Vehicles and obfuscated the true nature of the warnings from third parties, whistleblowers, and governmental entities about the discrepancies in emissions testing and the defeat devices present in the Affected Vehicles.
- 265. The RICO Defendants and each member of the conspiracy, with knowledge and intent, have agreed to the overall objectives of the conspiracy and participated in the common course of conduct to commit acts of fraud and indecency in designing, manufacturing, distributing, marketing, testing, and/or selling the Affected Vehicles (and the defeat devices contained therein).

21

23

24 25

26 27

200.	mae	ea, for	me	conspiracy	to st	iccee	ea ea	ich of t	ne kico	Dere	endants and	meir	co-
conspirators	had to	agree	to	implement	and	use	the	similar	devices	and	fraudulent	tactic	s –
specifically of	comple	te secre	су а	about the de	efeat o	devic	es ii	n the At	ffected V	ehicle	es.		

- 267. The RICO Defendants knew and intended that government regulators as well as DAM would rely on the material misrepresentations and omissions made by them and VW Group about the Affected Vehicles. The RICO Defendants knew and intended that existing and proposed franchise dealers, including DAM, would incur costs and damages as a result. As fully alleged herein, DAM, along with other existing and prospective franchise dealers, relied upon Defendants' representations and omissions that were made or caused by them. DAM's reliance is made obvious by the fact that: (1) it invested hundreds of thousands of dollars in the Westerville LOI and the concomitant VW-brand dealership, whose worth has now plummeted since the scheme was revealed; and (2) its invested substantial time and effort in attempt to fulfill the Westerville LOI, in part to be able to sell and service the Affected Vehicles, but some of which are now no longer in operation. In addition, the EPA, CARB, and other regulators relied on the misrepresentations and material omissions made or caused to be made by the RICO Defendants; otherwise, Volkswagen could not have obtained valid COCs and EOs to sell the Affected Vehicles.
- 268. The RICO Defendants conduct in furtherance of this scheme was intentional. DAM was harmed as a result of the RICO Defendants' intentional conduct. DAM, regulators and consumers, among others, relied on the RICO Defendants' material misrepresentations and omissions.
- 269. As described herein, the RICO Defendants engaged in a pattern of related and continuous predicate acts for many years. The predicate acts constituted a variety of unlawful activities, each conducted with the common purpose of defrauding DAM and other franchise dealers and obtaining significant monies, revenues, and capital investments from them and through

13

15

20

21

24

25 26

27

them while not providing the VW-brand and popular products, like the Affected Vehicles, on which
DAM relied in deciding to pursue the Westerville LOI and expending substantial funds in
furtherance thereof. The predicate acts also had the same or similar results, participants, victims,
and methods of commission. The predicate acts were related and not isolated events.

- 270. The predicate acts all had the purpose of generating significant revenue and profits for the RICO Defendants at the expense of DAM, other franchise dealers and consumers. The predicate acts were committed or caused to be committed by the RICO Defendants through their participation in the Emissions Fraud Enterprise and in furtherance of its fraudulent scheme, and were interrelated in that they involved obtaining DAM's capital investments for an artificially inflated VW-brand and potential profit as well as dealership goodwill values, and avoiding the expenses associated with remediating the Affected Vehicles.
- 271. During the design, manufacture, testing, marketing and sale of the Affected Vehicles, the RICO Defendants shared technical, marketing and financial information that plainly revealed the emissions control systems in the Affected Vehicles as the ineffective, illegal and fraudulent pieces of technology they were and are. Nevertheless, the RICO Defendants shared and disseminated information that deliberately represented Affected Vehicles as "clean," "environmentally friendly," and "fuel efficient."
- 272. By reason of and as a result of the conduct of the RICO Defendants, and in particular, its pattern of racketeering activity, DAM has been injured in its business and/or property in multiple ways, including but not limited:
 - a. Loss of the benefit of the bargain for which DAM had negotiated in return for its operation and divestment of the New Port Richey VW store at Volkswagen's direction;
 - b. Overpayment or excessive investment in the Westerville LOI;

- c. Loss of monies expended in reliance on and in fulfillment of the Westerville LOI;
- d. Loss of actual value in the Westerville LOI;
- e. Loss of value of the prospective VW franchise; and
- f. Loss of expected profits.
- 273. The RICO Defendants' violations of 18 U.S.C. § 1962(c) and (d) have directly and proximately caused injuries and damages to DAM, and DAM is entitled to bring this action for three times its actual damages, as well as injunctive/equitable relief, costs, and reasonable attorneys' fees pursuant to 18 U.S.C. § 1964(c). Each of the RICO Defendants knew, understood and intended for DAM to rely upon its potential sales and service revenue from the Affected Vehicles, and knew, understood and foresaw that revelation of the truth would injure DAM and result in those expectations not being fulfilled.
- As explained above, DAM operated the New Port Richey Dealership solely because of an agreement with Volkswagen that it would provide DAM with the lucrative opportunity to open another VW dealership in a market of its choosing as compensation for its operating and divesting of the New Port Richey Dealership. Based on certain representations made by Volkswagen about the value of the Westerville LOI and its open point, DAM selected the Westerville LOI as the aforementioned bargained-for compensation. According to Volkswagen, Westerville was the largest available point in the country and the opportunity to open a dealership there had significant value to DAM. DAM specifically bargained for the Westerville LOI as compensation for its agreement with VW to operate the New Port Richey Dealership and divest it once its business was stabilized.
- 275. The Westerville LOI provided DAM with the exclusive right to open a potentially-lucrative car dealership in Westerville, Ohio. The value of any LOI is directly correlative to the value of the car dealership that it provides the holder the right to build and operate. Thus, to

ascertain the amount of value degradation in the Westerville LOI resulting from Defendants' conspiracy one can look to what the corresponding change in value the underlying car dealership would have experienced over the time period from when DAM negotiated for the Westerville LOI versus when the Dieselgate scandal was revealed. This analysis makes clear that the value of all VW dealerships had been inflated by Defendants' RICO conspiracy. Therefore, the value of the Westerville LOI was likewise inflated.

276. Experts in automotive dealership valuation generally recognize that a car dealership's aggregate value is the sum of its "hard" assets (real estate, new motor vehicles, used motor vehicles, parts inventory, etc.) as well as its "blue sky," which is the value of the brand it represents in its specific market. Blue sky compromises the predominant portion of the total asset value for the vast majority of dealerships in the United States.

277. Experts in automotive dealership valuation calculate blue sky value as a multiple of annual pretax earnings. Alan Haig, one such expert, publishes a quarterly report, the Haig Report, that monitors the changing blue sky values of different brands of dealerships.

278. At Year End 2013 (the oldest, publicly-available year of the Haig Report), Volkswagen brand dealerships had a blue sky multiple of 3.0x-4.0x pretax earnings. ¹⁰² The Haig Report's estimates of blue sky value of VW brand dealerships would change dramatically over the next few years.

As part of the process to secure the Westerville LOI, DAM was required to create pro forma financial statements for its future dealership operations. Therein, DAM estimated that the dealership it would open pursuant to the Westerville LOI could expect pretax earnings of

¹⁰² These multiples are presented as a range for each brand of dealership, but as Mr. Haig makes clear there are other factors that can drive a multiple to the high end or low end of the range or even out of it entirely. Some examples that would push the multiple to the high end of the range include a dealership in a "hot" market or a dealership that is underperforming relative to its market.

approximately \$2,051,038 by its second year in operation. ¹⁰³ Thus, the Westerville LOI would have provided the opportunity to create an asset with a blue sky value of approximately \$6,153,114 to \$8,204,152, using the blue sky multiples for 2013, which is when DAM received the Westerville LOI.

Haig Partners released their 3rd Quarter 2015 Haig Report shortly after the revelation of the Dieselgate Scandal. In that report, Volkswagen brand dealerships were no longer being valued using a blue sky multiple, which happens when brands perform poorly. Instead, Haig Partners simply provided a range of blue sky value for the dealership. Volkswagen brand dealerships were estimated to be worth approximately \$250,000 - \$2,500,000. By year end 2015, the Haig Report listed Volkswagen brand dealerships blue sky value at \$0 - \$2,000,000.

Thus, the underlying dealership, and concomitantly the Westerville LOI, had lost substantial value as a result of Defendants' RICO conspiracy – perhaps as much as \$6 million. While the Westerville LOI may not have exactly the same value as an already-opened dealership, the correlation is certain and provides sufficient context to show the substantial damage that DAM suffered from the RICO conspiracy when it negotiated for (i.e., overpaid for) the Westerville LOI back in 2013.

When DAM negotiated with Volkswagen to operate the New Port Richey dealership, it expected to be getting an LOI that would lead to a franchise with a blue sky value of approximately \$6-\$8 million. However, the value of the Westerville LOI was artificially inflated by the RICO conspiracy, because it ultimately did not provide for a dealership with the ability to sell and service TDI vehicles. Had DAM known at the time that the value of the Westerville LOI

¹⁰³ The expected revenue and expenses used in the *pro forma* financial statements were calculated based on the averages for the Midwest Region (where the Westerville Dealership would have been located) and its Area composite financial statements, Area 3E.

was worth substantially less than \$6-\$8 million, it would have not agreed to this bargained for exchange.

DAM includes the allegations above to show a reasonable basis for the loss in value suffered by the Westerville LOI to ensure it has sufficiently pled recoverable damages as a result of the RICO conspiracy. However, at trial, DAM's expert would provide testimony as to the precise value of the Westerville LOI, perhaps using other valuation methodologies. But because the value of the Westerville LOI is directly related to the value of the underlying dealership and the value of this underlying dealership deteriorated due to the conspiracy, DAM "overpaid" for the Westerville LOI.

At the time DAM agreed to operate the New Port Richey dealership, it struck the above-described agreement with Volkswagen. If, at the time of this agreement, DAM had known about the defeat-device and the RICO conspiracy, DAM would not have accepted the Westerville LOI in return for its agreement with Volkswagen. It estimated that the dealership that Westerville LOI allowed for had a value of approximately \$6-\$8 million and it would have reached a very different conclusion had the RICO conspiracy already been revealed. Instead, DAM would have requested direct monetary compensation or operational and monetary support to its existing dealerships from VW to enter into the same agreement.

WHEREFORE DAM seeks:

- (a) Actual damages as proven at trial;
- (b) Loss of actual value in the Westerville LOI;
- (c) Lost benefit of the bargain for which DAM had negotiated with Volkswagen when it agreed to operate and divest itself of the New Port Richey VW store;
- (d) Loss of expected profits from the operation of the VW-brand Westerville motor vehicle dealership that Westerville LOI provided for;

- (e) Treble and punitive damages as allowed under law and as proven at trial;
- (f) Attorneys' fees and related litigation expenses, including prejudgment interest and costs; and
- (g) any other relief that this Court deems just and appropriate.

COUNT II – COMMON LAW CONSPIRACY

- 285. Plaintiff, Direct Automotive Management, Inc., incorporates the preceding paragraphs of this Second Amended Complaint, as if fully set forth herein.
- As detailed above, Volkswagen and Bosch and their co-conspirators conspired to commit an unlawful act, i.e. misrepresenting to U.S. regulators, consumers, franchise dealers, and prospective franchise that the Affected Vehicles and component parts in the United States, were compliant with federal law, while knowing that the Affected Vehicles and component parts actually violated federal law. The RICO Defendants' conduct, as alleged herein, deceived U.S. regulators, consumers, franchise dealers, and prospective franchise dealers like DAM.
- 287. Each RICO Defendant unlawfully intended to injure U.S. regulators, consumers, franchise dealers, and prospective franchise dealers like DAM. This unlawful intent was without justification.
- 288. Each RICO Defendant committed at least one overt act in pursuance of the conspiracy, as alleged in the preceding paragraphs.
 - 289. As detailed above, the conspiracy dates back to early 2006, if not before.
- DAM suffered damage as a result of the acts performed pursuant to the conspiracy. Such damages include, but are not limited to, (1) a decrease in the market value and/or expected earning capacity of the Westerville dealership that the Westerville LOI provided an exclusive right for; (2) excessive out of pocket expenditures in furtherance of the Westerville LOI due to the conspiracy. The amount of these damages will be proven at trial.

291. As a result of this harm, DAM seeks to recover actual and punitive damages, 1 attorneys' fees, and other relief as allowed under Florida law. 2 WHEREFORE Plaintiff DAM seeks: 3 (a) Actual damages as proven at trial; 4 5 (b) Loss of actual value in the Westerville LOI; 6 (c) Loss of expected profits from the operation of the VW-brand Westerville motor 7 vehicle franchise; 8 (d) Lost benefit of the bargain for which it had negotiated; 9 (e) Loss of other potential profits from investment opportunities; 10 (f) Punitive damages as allowed under law and proven at trial; and 11 12 (g) Such further relief as this Court deems just and appropriate. 13 **PRAYER FOR RELIEF** 14 Accordingly, DAM respectfully requests that the Court, following a jury trial, grant 15 judgment in its favor in an amount that is fair and reasonable, including compensatory damages, 16 consequential damages, benefit of the bargain damages, lost profits, treble damages, punitive 17 damages, costs, attorneys' fees, and for such other relief as the Court deems just and appropriate. 18 **JURY TRIAL DEMANDED** 19 20 Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff demands a trial by jury of all 21 claims in this Complaint so triable. 22 23 24 25 26 27 28 - 90 -

1	Dated: March 2, 2020	Respectfully submitted,						
2		DIRECT AUTOMOTIVE MANAGEMENT, INC. By Counsel						
3		By Counsel						
4		/s/ W. Kirby Bissell						
5		Richard N. Sox, FL Bar No. 982156 (Pro Hac Vice) W. Kirby Bissell, FL Bar No. 0100166 (Pro Hac Vice)						
6		Attorneys for Plaintiff BASS SOX MERCER						
7		2822 Remington Green Circle						
8		Tallahassee, Florida 32308 Phone: 850-878-6404						
9		Fax: 850-942-4869						
9		rsox@dealerlawyer.com						
10		kbissell@dealerlawyer.com						
11		Lead Counsel for Plaintiff						
12		WALSH, COLUCCI, LUBELEY,						
13		& WALSH, P.C.						
		E. Andrew Burcher, VSB #41310						
14		Matthew A, Westover, VSB #82798						
15		Attorneys for Plaintiff						
16		4310 Prince William Parkway, Suite 300 Prince William, VA 22192						
		Phone: (703) 680-4664						
17		Fax: (703) 680-2161						
18		eaburcher@thelandlawyers.com						
10		mwestover@thelandlawyers.com						
19		Co-Counsel for Plaintiff in Eastern District of Virginia						
20								
21	CERTIFICATE OF SERVICE							
22	I W Kirby Rissall baraby of	ertify that on the 2nd day of March, 2020, I filed the						
23	foregoing Second Amended Compla	int using the CM/ECF system which will send a notice of						
24	electronic filing through the Court's	electronic filing systems to counsel for the Defendants.						
25								
26		//W K: 1 D: 11						
27		/s/ W. Kirby Bissell Richard N. Sox, FL Bar No. 982156 (Pro Hac Vice)						
		W. Kirby Bissell, FL Bar No. 0100166 (Pro Hac Vice)						
28		- 91 - [SECOND AMENDED COMPLAINT]						